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IN THE

Supreme Court of the United States

OCTOBER TERM, 1977

No. 77-695

AMERICAN PUBLIC GAS ASSOCIATION, *et al.*,
Petitioners

v.

FEDERAL ENERGY REGULATORY COMMISSION, *et al.*,
[Formerly Federal Power Commission]
Respondents.

SEPARATE APPENDIX TO ACCOMPANY PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

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November 15, 1977

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APPENDIX A

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

THE SECOND NATIONAL NATURAL GAS RATE CASES

No. 76-2000, et al.

AMERICAN PUBLIC GAS ASSOCIATION, et al., PETITIONERS *

v.

FEDERAL POWER COMMISSION, RESPONDENT *

---

* Consolidated with the following cases (identified by this Circuit's case number and petitioner) originally arising in or transferred to this Circuit, in all of which the Federal Power Commission is the respondent:

Originally filed in this Circuit: 76-2001, Senators James Abourezk, John Durkin, and William Proxmire, and Representatives Les Aspin, Berkley Bedell, William Brodhead, et al.; 76-2041, United Distribution Companies; 76-2053, Tennessee Public Service Commission; 76-2069, Phillips Petroleum Company; 76-2072, Public Service Commission of the State of New York; 76-2103, Marathon Oil Company; 76-2108, Belco Petroleum Corporation; 76-2137, Associated Gas Distributors; 76-2147, Laclede Gas Company; 77-1005, Mountain Fuel Supply Company; 77-1016, Ashland Oil, Inc.; 77-1022, Gulf Oil Corporation:

From the First Circuit: 77-1117, Cabot Corporation;

From the Second Circuit: 77-1126, Mobil Oil Corporation; 77-1127, Exxon Corporation;

From the Third Circuit: 77-1139, Texaco, Inc.; 77-1140, Gulf Oil Corporation; 77-1141, Sohio Petroleum Company;

From the Fifth Circuit: 77-1039, Continental Oil Company; 77-1052, Superior Oil Company; 77-1060, Tenneco Oil

Petitions for Review of Orders of the
Federal Power Commission

Argued March 23, 1977
March 24, 1977

Decided June 16, 1977

Judgment entered this date

Charles F. Wheatley, Jr., with whom *William T. Miller* and *Stanley W. Balis* were on the brief for petitioners in No. 76-2000 and intervenors, American Public Gas Association, et al.

James L. Feldesman was on the brief for petitioner, Consumer Federation of America in No. 76-2000.

Warren Spannaus, Attorney General, State of Minnesota was on the brief for petitioner, State of Minnesota in No. 76-2000.

Company; 77-1063, General American Oil Company of Texas; 77-1064, Placid Oil Company; 77-1065, Shell Oil Company; 77-1066, Aminoil USA, Inc., et al.; 77-1067, Pennzoil Company, et al.; 77-1068, Aztec Oil and Gas Company; 77-1069, Austral Oil Company, Inc; 77-1070, Enserch Exploration, Inc.; 77-1071, Hunt Oil Company, et al.; 77-1072, Freeport Minerals Company; 77-1073, Inexco Oil Company; 77-1074, Ecee, Inc., et al.; 77-1075, Louisiana Land and Exploration Company, et al.;

From the Seventh Circuit: 77-1120, Amoco Production Company; 77-1121, Natural Gas Pipeline Company of America;

From the Ninth Circuit: 77-1219, Getty Oil Company; 77-1220, Atlantic Richfield Company; 77-1221, Union Oil Company;

From the Tenth Circuit: 77-1118, Kerr-McGee Corporation; 77-1119, Cities Service Oil Company; 77-1288, Skelly Oil Company.

Rodney A. Wilson, Special Assistant Attorney General, State of Minnesota was on the brief for petitioner, Minnesota Public Service Commission in No. 76-2000.

Steven M. Schur, Chief Counsel, Public Service Commission of Wisconsin was on the brief for petitioner, Public Service Commission of Wisconsin in No. 76-2000.

David B. Graham was on the brief for petitioner, Natural Rural Electric Cooperative Association in No. 76-2000.

John Gunther was on the brief for petitioner, United States Conference of Mayors in No. 76-2000.

James F. Flug was on the brief for petitioner, Energy Action Committee in No. 76-2000.

Stephen Schlossberg was on the brief for petitioner, United Automobile, Aerospace and Agriculture Implement Workers of America in No. 76-2000.

Frank W. Frisk, Jr., was on the brief for petitioner, American Public Power Association in No. 76-2000.

Charles Brannan was on the brief for petitioner, National Farmers Union in No. 76-2000.

Lee D. Sinclair was on the brief for petitioner, National Farmers Organization in No. 76-2000.

Leslie G. Foschio, Corporation Counsel, Buffalo, New York was on the brief for petitioner, City of Buffalo, New York in No. 76-2000.

William Straub, Erie County Attorney, was on the brief for petitioner County of Erie, New York in No. 76-2000. *James L. Magavern* also entered an appearance for petitioner in No. 76-2000.

Geoffrey L. Brazier was on the brief for petitioner, Montana Consumer Counsel in No. 76-2000.

Felix G. Forlenza was on the brief for petitioner, New Jersey Board of Public Utility Commissioners in No. 76-2000. *Carla Vivian Bello* also entered an appearance for petitioner, New Jersey Board of Public Utility Commissioners in No. 76-2000.

Daniel Guttman, with whom *Alan Roth* was on the brief for petitioners, in No. 76-2001 and intervenors Senators James Abourezk, et al.

Richard A. Solomon, with whom *Peter H. Schiff*, General Counsel, Public Service Commission of the State of New York and *Sheila S. Hollis* were on the brief, for petitioner in No. 76-2072 and intervenor The Public Service Commission of the State of New York.

Frederick Moring, with whom *Philip M. Marston* was on the brief for petitioner in Nos. 76-2137 and 77-1013 and intervenors, Associated Gas Distributors. *Dana Contratto* also entered an appearance for intervenor, Associated Gas Distributors.

John F. Bates, with whom *Robert S. Campbell, Jr.*, and *R. G. Groussman*, were on the brief, for petitioner in No. 77-1005.

C. William Cooper and *Tilford A. Jones* for petitioners in No. 76-2041 and intervenor United Distribution Companies.

Gordon Gooch, with whom *Charles M. Darling, IV*, *John M. Young*, *Michael B. Silva* and *Phyllis Rainey* were on the brief, for petitioners in Nos. 77-1060 and 77-1067 and intervenors, Pennzoil Company, et al. and Tenneco Oil Company, et al.

Thomas G. Johnson for petitioner in No. 77-1065 and intervenor, Shell Oil Company.

J. Evans Attwell, with whom *Judy M. Johnson* was on the brief for petitioners in Nos. 76-2108, 77-1068,

77-1069 and intervenors, Austral Oil Company, Inc., Aztec Oil and Gas Company, Belco Petroleum Corporation and Transocean Oil, Inc.

Bernard A. Foster, III, with whom *H. H. Hillyer, Jr.*, was on the brief for petitioners in No. 77-1075.

Paul W. Mallory, with whom *Joseph M. Wells*, *Paul E. Goldstein* and *Harry L. Albrecht* were on the brief, for petitioner in No. 77-1121 and intervenor, Natural Gas Pipeline Company of America in Nos. 76-2053, 76-2041 and 76-2072.

Drexel D. Journey, General Counsel Federal Power Commission and *Patrick J. Keeley*, Attorney Federal Power Commission with whom *Robert W. Perdue*, Deputy General Counsel and *Allan Abbot Tuttle*, Solicitor, Federal Power Commission were on the brief, for respondent. *Philip R. Telleen*, Attorney, Federal Power Commission also entered an appearance for respondent.

John L. Williford was on the brief, for petitioner in No. 76-2069 and intervenor Phillips Petroleum Company.

B. James McGraw and *A. Randall Friday* were on the brief, for petitioner in Nos. 77-1022 and 77-1140 and intervenor, Gulf Oil Corporation.

Derrill Cody and *Patricia D. Robinson* were on the brief for petitioner in No. 77-1118 and intervenor Kerr-McGee Corporation.

Tom P. Hamill, *R. D. Haworth* and *Roscoe Elmore* were on the brief for petitioner in No. 77-1126 and intervenor Mobil Oil Corporation.

W. B. Wagner, Jr., *Pat E. Timmons*, *James M. Dunnam* and *David Bonderman* were on the brief for petitioner in No. 77-1052 and intervenor, The Superior Oil Company.

Martin N. Erck, Paul W. Wright and *Edmunds Travis, Jr.*, were on the brief for petitioner in No. 77-1127 and intervenor Exxon Corporation.

David M. Whitney was on the brief for petitioner in No. 77-1066 and intervenors, Aminoil Production Company.

Wm. H. Emerson was on the brief for petitioner in No. 77-1120 and intervenor Amoco Production Company.

R. F. Generelly was on the brief for petitioner in No. 77-1016 and intervenors Ashland Oil, Inc. and General American Oil Company of Texas and also entered an appearance for petitioner in No. 77-1063.

E. J. Kremer and *D. Aston* were on the brief for petitioner in No. 77-1220 and intervenor Atlantic Richfield Company.

Edwin S. Nail was on the brief for petitioner in No. 77-1117 and intervenor Cabot Corporation.

Robert S. Wheeler and *Sam Riggs, Jr.*, were on the brief for petitioner in No. 77-1119 and intervenor Cities Service Oil Company.

Tom Burton and *John M. Badger* were on the brief for petitioner in No. 77-1039 and intervenor Continental Oil Company. *Gordon Gooch* and *Charles M. Darling, IV*, also entered an appearance for petitioner in No. 77-1039.

Scott P. Anger was on the brief for petitioner in No. 77-1070 and intervenor Enserch Exploration, Inc.

Wm. Neal Powers, Jr., was on the brief for petitioners in Nos. 77-1072 and 77-1074 and intervenors Freeport Minerals Company, Ecee, Inc., et al. and Estate of E. Cockrill, Jr., et al.

Cloy D. Monzingo was on the brief for petitioner in No. 77-1219 and intervenor Getty Oil Company. *Jack L. Brandon* also entered an appearance for Intervenor Getty Oil Company.

Robert W. Henderson was on the brief for petitioners in No. 77-1071 and intervenors, Hunt Oil Company, et al.

Arthur S. Berner was on the brief for petitioner in No. 77-1073 and intervenor, Inexco Oil Company. *Wm. Neal Powers, Jr.*, also entered an appearance for petitioner in No. 77-1073.

William A. Sackman was on the brief for petitioner in No. 76-2103 and intervenor Marathon Oil Company.

Paul W. Hicks was on the brief for petitioner in No. 77-1064 and intervenor Placid Oil Company. *Jimmy C. Bailey* also entered an appearance for petitioner in No. 77-1064 and intervenor Placid Oil Company.

Richard F. Remmers was on the brief for petitioner in No. 77-1141 and intervenor Sohio Petroleum Company.

Roger L. Brandt was on the brief for petitioner in No. 77-1139 and intervenor, Texaco, Inc. *William T. Benham* also entered an appearance for intervenor Texaco, Inc.

Kenneth L. Riedman, Jr., and *Richard F. Wornson* were on the brief for petitioner in No. 77-1221 and intervenor Union Oil Company of California.

Gordon P. MacDougall, Special Assistant Counsel, Commonwealth of Pennsylvania was on the brief for intervenors Commonwealth of Pennsylvania and Pennsylvania Public Utilities Commission in No. 76-2000.

Harold B. Scoggins, Jr., was on the brief for intervenor, Independent Petroleum Association of America in Nos. 76-2000 and 76-2001.

Frank P. Saponaro, Jr., and *J. Randolph Elliott* were on the brief for intervenor Statex Petroleum, Inc.

Gordon Gooch was on the brief for intervenors, Felmont Oil Corporation, Coquina Oil Corporation and The Rodman Company.

A. S. Lacy, was on the brief for intervenor Alabama Gas Corporation in No. 76-2000.

Ben Stead, Assistant Attorney General for the Public Utilities Commission of the State of South Dakota was on the brief for intervenor Public Utilities Commission State of South Dakota.

M. Howard Petricoff and *Henry J. Bourguignon* filed a brief on behalf of the City of Toledo, Ohio as amicus curiae urging reversal.

Philip C. Wrangle filed a brief on behalf of Sonat Exploration Company and the Offshore Company as amicus curiae urging reversal.

J. Evans Attwell and *Judy M. Johnson* filed a brief on behalf of Small Producers as amicus curiae urging reversal.

Eugene W. Ward and *T. E. Midyett, Jr.*, entered appearances for petitioner in No. 76-2053.

J. David Mann, Jr. entered an appearance for petitioner in No. 76-2147 and intervenor Laclede Gas Company.

H. Lamar Curtis entered an appearance for intervenor J. M. Huber Corporation.

Jerome J. McGrath entered an appearance for intervenor, Interstate Natural Gas Association of America.

Ronald E. Jarrett and *Ronald J. Jacobs* entered appearances for intervenor, Skelly Oil Company.

James D. Olsen entered an appearance for intervenor Sun Oil Company (Delaware).

George W. Hugo and *Bruce F. Kiely* entered an appearance for intervenor Texas Gulf, Inc.

Thomas W. Lynch entered an appearance for intervenor Texas Pacific Oil Company, Inc.

Peter W. Hanschen, Malcolm H. Furbush and *Daniel E. Gibson* entered appearances for intervenor Pacific Gas and Electric Company.

David G. Stevenson entered an appearance for intervenor Amerada Hess Corporation.

Justin R. Wolf entered an appearance for intervenors The California Company, et al. and Chevron Oil Company Western Division.

T. Brooke Farnsworth and *Wm. Neal Powers* entered appearances for intervenor Damson Oil Corporation.

Harold L. Talisman, Dale A. Wright, Melvin Richter, Gregory Grady and *Terence J. Collins* entered appearances for intervenors, Cities Service Gas Company and Tennessee Gas Pipeline Company, etc.

Toney Anaya, Assistant Attorney General, New Mexico and *Cameron R. Graham*, Special Assistant Attorney General entered appearances for intervenor, State of New Mexico.

Jeffrey A. Meith and *Thomas D. Clarke* entered appearances for intervenor Southern California Gas Company.

James L. Bomar, Jr., entered an appearance for intervenor East Tennessee Group.

John B. Randolph entered an appearance for intervenor Mississippi River Transmission Corporation.

Before: FAHY, *Senior Circuit Judge*, LEVENTHAL, *Circuit Judge* and GERHARD A. GESELL,* *United States District Judge* for the United States District Court for the District of Columbia

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* Sitting by designation pursuant to 28 U.S.C. § 292(a).

Opinions for the Court filed by LEVENTHAL, *Circuit Judge*, and FAHY, *Senior Circuit Judge*.

Opinion dissenting in part by FAHY, *Senior Circuit Judge*.

LEVENTHAL, *Circuit Judge*: This case presents petitions to review the 1976 orders of the Federal Power Commission in the second nationwide natural gas rate proceeding.

The pertinent orders embrace Opinion No. 770, issued July 27, 1976; clarifying orders issued in September and October 1976; and Opinion No. 770-A, on rehearing, issued November 5, 1976. In brief, the FPC's orders prescribed the following rates:

(a) $1.42 per Mcf, for sales of gas from wells commenced on or after January 1, 1975—with provision for escalation.[1]

(b) $0.93 Mcf—reduced from the $1.01 rate prescribed in Opinion 770—for 1973-1974 biennium gas, *i.e.*, sales of gas from wells commenced on or after January 1, 1973 and prior to January 1, 1975. This rate is also subject to escalation.[2]

(c) $0.52 per Mcf, applicable to sales of gas under "renewal contracts" where a contract has expired by its own terms. Again there is escalation.[3]

These rates represent increases from the nationwide rate of $.52 per Mcf, established by Opinion No. 699-H, which was upheld in *Shell Oil Co. v. FPC*, 520 F.2d

[1] Of one cent per quarter. The rate increased to $1.44 on January 1, 1977, and to $1.45 on April 1, 1977.

[2] Of one cent per annum. It increased on January 1, 1977 to $.94.

[3] Of one cent per annum. The rate increased to $0.53 per Mcf on January 1, 1977.

1061 (5th Cir. 1975), *cert. denied sub nom California Co. v. FPC*, 426 U.S. 941 (1976).

The impact of the increase was estimated by the Commission at from $1.49 to $1.78 billions during the next 12 months.

Within seconds after Opinion 770-A issued, competing petitions for review were filed in this circuit and in other circuits. A panel of this court heard oral argument on the question of the proper venue for this proceeding and held that although petitions for review had been filed simultaneously in this circuit and the Fifth Circuit, the ultimate standard announced by 28 U.S.C. § 2112(a), "the convenience of the parties in the interest of justice," dictated that the case be heard in the District of Columbia, *American Public Gas Association v. FPC*, No. 76-2000, —— F.2d —— (D.C.Cir., Dec. 30, 1976).

This court issued orders for an expedited briefing schedule. We heard oral argument on March 23 and 24, 1977. All petitioners complain that the FPC orders violate pertinent statutory mandates, lack support in substantial evidence and are arbitrary and capricious. Essentially, the consumer petitioners complain that the rates by the FPC are too high; the producer petitioners complain that those rates are too low. There are also other parties and positions, as will appear.

Pending disposition, this court provided for contingent refunds. While Opinion 770 was under reconsideration by the Commission, this court exercised its jurisdiction under the All Writs Act, 28 U.S.C. § 1651 (1970), to preserve the possibility of a refund. See Order of August 9, 1976, *American Public Gas Association v. FPC*, 543 F.2d 356 (D.C.Cir. 1976). After issuance of Opinion 770-A, this court stayed the FPC's orders except as to producers who undertook to refund portions of the rate increases subsequently held unlawful and except

as to gas from onshore wells commenced after July 27, 1976. Order of November 9, 1976, amended November 18, 1976, included as appendices to *American Public Gas Association* v. *FPC*, No. 76-2000, —— F.2d —— (1976).[4]

We have given due consideration to a vast number of issues raised by the various petitioners. We cannot practicably speak separately to each of the issues, but the considerable discussion we provide, for the issues of primary consequence, will fairly identify the bases of our conclusion that the orders before us should be affirmed. For convenience, we interject a Table of Contents identifying the topics specifically discussed by the court.

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[4] The order provided, however:

> that the use of any refunds which might accrue thereunder shall be subject in the first instance to consideration by the Commission, its conclusion with respect thereto being subject to court review.

Several producers sought a writ of mandamus with respect to this court's action in the United States Supreme Court. The panel which had entered the orders of August 9, November 9 and November 18, 1976, filed an explanatory memorandum with that Court. Upon motion of the producers, the petition was dismissed. Amerada Hess Corp., et al. v. Fahy, et al., and American Public Gas Association, —— U.S. —— (Jan. 25, 1977).

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I. Overview and Scope of Review

A. *Regulatory Background*

The FPC's first venture into a national rate for new natural gas came in its Docket No. R-389-B. This resulted in Opinion 699 and amendments, culminating in Opinion No. 699-H, issued December 4, 1974, which fixed a nationwide base rate of 52¢ per Mcf throughout the United States (except Alaska) for new gas (governing wells commenced and deliveries begun after January 1, 1973, and also new contracts replacing expired contracts on "flowing gas"). Opinion 699 and its subsequent clarifications were affirmed in the 1975 *Shell* opinion of the Fifth Circuit.[5] That opinion sketches, and we do not repeat, the background of previous developments in producer regulation—the FPC's early abstinence; the 1954 *Phillips* decision,[6] that the Natural Gas Act provided for regulation of prices charged by natural gas producers in interstate sales; and the FPC's regulation of producers by regional areas, upheld in the *Permian Basin Area Rate Cases*, 390 U.S. 747 (1968).

Shortly after beginning Docket R-389-B, the FPC commenced a separate Docket No. R-478, to fix nationwide rates for "flowing gas," from wells drilled prior to January 1, 1973. Opinion No. 749, issued on December 31, 1975, established a rate of 23.5¢ per Mcf, increasing to 29.5¢, as of July 1, 1976, the date when the 22% depletion tax allowance expired for regulated gas production. That is pending on review in the Fifth Circuit.[7]

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[5] Shell Oil Co. v. FPC, 520 F.2d 1061 (5th Cir. 1975), *cert. denied*, California Co. v. FPC, 426 U.S. 941 (1976).

[6] Phillips Petroleum Co. v. Wisconsin, 347 U.S. 672 (1954).

[7] Tenneco Oil Co., et al. v. FPC, No. 75-2960 (appeals by both producer and consumer interests).

B. *Procedure in FPC Docket*

On December 4, 1974, the same day that Opinion 699-H issued, the FPC instituted Docket RM-75-14, which culminated in the orders and opinions (770 and 770-A) currently under review. The notice projected need for a revision of Opinion 699-H to govern new natural gas for the 1975-1976 biennium and such changes as might further the public interest.

The FPC did not propose specific rates in its Notice but stated it would rely on responses by the parties and Commission staff. The order designated as respondents all interstate pipeline companies, and all producers with jurisdictional sales exceeding 10 million Mcf per annum, who have since participated as Indicated Producer Respondents. Ultimately some 46 parties and groups of parties, representing all segments of the natural gas industry and the consuming public, filed written comments and cross-comments on a host of matters.[8]

The ability of parties to comment was limited in one respect much stressed to this court—concerning the matter of the Staff's study of 31 off-shore Louisiana gas leases in order to probe the issue of gas reserves.[9]

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[8] The time for initial comments was extended to August 11, 1975, and for reply comments to September 11. There were also supplemental reply comments; comments invited by FPC order of June 16, 1975, as to the weight to be given to unregulated intrastate gas prices; and comments invited by various FPC orders (dated August 4, 1975, October 3, 1975, and March 23, 1976) concerning several cost studies and rate recommendations made by the FPC's Bureau of Natural Gas (BNG) and its Office of Economics (OEC).

[9] In June 1975 the FPC directed its Staff to update a previous study it had considered in Opinion 699-H concerning the reporting of reserves in some 31 off-shore Louisiana gas leases. The purpose was to investigate the gas reserve figures compiled by the American Gas Association. The producers compelled to submit their reserve estimates secured an inter-

C. *Scope of Issues*

Opinions 770 and 770A establish rates dramatically higher than the national rates previously established in Opinion 699-H: a near-tripling for new gas; for the 1973-74 biennium, an increase from 52 to 93 cents. As already noted, the Commission estimated an impact of the increase over the next year ranging from $1.49 to $1.78 billions.

Commensurate with these figures are the complexity, variety and range of the issues raised by the consumer protests. Nor have the producers been supine. Their complaints against the level of the rates, and their perceived inadequacy, are sharpened by their anguish that the FPC has reverted to the practice—abandoned in Opinion 699-H—of vintaging gas prices according to the period of production; and by resentment that Opinion 770-A, in response to consumer presentations on rehearing, set a price for the 1973-74 biennium of 93 cents instead of the $1.01 set in Opinion 770, and narrowed the eligibility for higher new rates.

This is a major case. This court's 1976 orders provided for submission on an expedited basis. The need for expedition of the decision and opinion has been underscored by the increasing awareness that the country is

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locutory order from the Fifth Circuit requiring these to be kept in confidence pending determination of the producers' appeals. Accordingly, the Commission did not release the data for public comment "as it had originally intended." On June 21, 1976, the FPC incorporated into the record conclusions from all of the data." The FPC was subsequently authorized by the court to release the data if it established an appropriate basis therefor, Pennzoil Co. v. FPC, No. 75-2961 (5th Cir. July 2, 1976), but it decided against such release on the ground that "the purposes of the 31 lease investigation have been largely accomplished", Opinion 770 Mimeo at 8, R. 2503.

in the midst of an energy crisis, and is considering measures to cope with it.

The court has also sought to expedite issuance of its opinion. All issues tendered have been given careful consideration, although they have not been discussed in the detail used by the parties. Issues not discussed in this opinion are technical; many concern matters where we agree with the disposition in *Shell*, and they would not account for any significant portion of the rate increase under review.

D. *Standards of Judicial Review*

The matrix of a court's consideration of the validity of a natural gas rate order lies in the scope of and standard for judicial review defined in pertinent decisions.

"Judicial review begins at the threshold, with enforcement of the requirement of reasonable procedure, with fair notice and opportunity to the parties to present their case." *Greater Boston TV v. FCC*, 143 U.S.App. D.C. 383, 392, 444 F.2d 841, 850 (1970), *cert. denied*, 403 U.S. 923 (1971). The details and techniques differ, but the essential principles apply even in proceedings governed by notice-and-comment disposition rather than evidentiary hearings. *Portland Cement Assn. v. Ruckelshaus*, 158 U.S.App.D.C. 308, 486 F.2d 375 (1973), *cert. denied*, 417 U.S. 921 (1974).

In substantive terms, the Administrative Procedure Act describes the principal judicial function with the direction that the reviewing court shall set aside agency action found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). The APA's terms direct inquiry whether the agency is "unsupported by substantial evidence" only in a case subject to 5 U.S.C. §§ 556, 557, or reviewed "on the record of an agency hearing pro-

vided by statute." The Natural Gas Act does not expressly require a hearing on the record. *United States v. Florida East Coast Ry.*, 410 U.S. 224 (1973). Section 19(b) of the Natural Gas Act, 15 U.S.C. § 717 et seq., does provide that the "finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive."

The issue of procedure—the permissibility of notice-and-written comment (informal rule-making)—is considered separately, in Judge Fahy's Opinion for the Court.

Some commentators have also put it that a statutory reference to "substantial evidence" requires a more rigorous standard of review than the arbitrary-capricious standard.[10] We agree with Judge Friendly that the issue is largely semantic, and that the two criteria "tend to converge" in notice-and-comment rulemaking. *Associated Industries of New York v. Dept. of Labor*, 487 F.2d 342, 348-350 (2d Cir. 1973). What is basic is the requirement that there be support in the public record for what is done, *City of Chicago v. FPC*, 147 U.S.App.D.C. 312, 458 F.2d 731 (1971), *cert. denied*, 405 U.S. 1074 (1972).

The ultimate standard of reasonableness of Federal Power Commission ratemaking was given an early gloss by the Supreme Court in terms of the "end result" test. *FPC* v. *Hope Natural Gas Co.*, 320 U.S. 591 (1944). The decision in *Permian Basin Area Rate Cases*, 390 U.S. 747 (1968) reshapes that test and guides us as to the principal ingredients of the court's functions.

(a) In assessing the numerous and disparate contentions arising out of a lengthy proceeding, the court has an authority "essentially narrow and circumscribed" and need not examine every detail if the total effect be reasonable. 390 U.S. at 766-67.

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[10] This view is implicit is some passages of the *Shell* opinion, *e.g.*, 520 F.2d at 1081.

(b) A presumption of validity attaches to each exercise of the Commission's expertise and those who would overturn its judgment have a heavy burden of making a convincing showing that it is unjust and unreasonable in its consequences. 390 U.S. at 767.

(c) However, there is a need for rate criteria, for "reviewing courts will require criteria more discriminating than justice and arbitrariness if they are sensibly to appraise the Commission's orders." 390 U.S. at 790.

(d) There is a "zone of reasonableness" in ratemaking, and within this zone the Commission may employ rates functionally to encourage production. 390 U.S. at 796-8.

In a much-quoted passage *Permian* summed up the ultimate criteria governing the reviewing court. See 390 U.S. at 791-92:

> It follows that the responsibilities of a reviewing court are essentially three. First, it must determine whether the Commission's order, viewed in light of the relevant facts and of the Commission's broad regulatory duties, abused or exceeded its authority. Second, the court must examine the manner in which the Commission has employed the methods of regulation which it has itself selected, and must decide whether each of the order's essential elements is supported by substantial evidence. Third, the court must determine whether the order may reasonably be expected to maintain financial integrity, attract necessary capital, and fairly compensate investors for the risks they have assumed, and yet provide appropriate protection to the relevant public interests, both existing and foreseeable. The court's responsibility is not to supplant the Commission's balance of these interests with one more nearly to its liking, but instead to assure itself that the Commission has given reasoned consideration to each of the pertinent factors. Judicial review of the Commission's orders will

> therefore function accurately and efficaciously only if the Commission indicates fully and carefully the methods by which, and the purposes for which, it has chosen to act, as well as its assessment of the consequences of its orders for the character and future development of the industry. We are, in addition, obliged at this juncture to give weight to the unusual difficulties of this first area proceeding; we must, however, emphasize that this weight must significantly lessen as the Commission's experience with area regulation lengthens. We shall examine the various issues presented by the rate structure in light of these interrelated criteria.

The Court's concept of "reasoned decisionmaking" is in essence the keystone of the Rule of Administrative Law. "The function of the court is to assure that the agency has given reasoned consideration to all the material facts and issues." *Greater Boston TV v. FCC*, 143 U.S.App.D.C. at 393, 444 F.2d at 851.

The *Permian* approach resonates as guidance for reviewing courts. Recent decisions underscore its vitality. The "zone of reasonableness" has been identified as accommodating a wide latitude to integrate cost factors with non-cost and policy considerations. *FPC v. Conway*, 426 U.S. 271 (1976). Especially significant is *Mobil Oil Corp. v. FPC*, 417 U.S. 283 (1974), wherein the Court expatiated on the roles of the FPC and reviewing court. The Supreme Court acknowledged that the primary responsibility for judicial review lay in the courts of appeals. It stressed that the equity powers of those courts properly accommodate to agency flexibility, so that, *e.g.*, affirmance of an order may retain agency latitude for modification. 417 U.S. at 311. The agency's flexibility is viewed broadly, to permit "pragmatic adjustments" based on exigencies of administration. 417 U.S. at 329. The FPC may tolerate inequities where it "squarely faced" up to the problem and deemed it less

significant than the pursuit of broad advantages to the public interest. 417 U.S. at 321-23.

Throughout *Mobil* reflects an approach to the "substantial evidence" standard as requiring the reviewing court to respect the agency's wide latitude for difficult policy choices, and in adjusting that standard "in this time of acute energy shortage" to provide greater freedom for new proposals and techniques.[11] Particular attention is called to the Court's discussion of the conclusion that refund credits and contingent escalation constituted appropriate means to assist capital formation for exploration.[12] The parties raised a not insubstantial issue. The Court's response identified the context that the Commission had taken "massive evidence" with voluminous exhibits and various cost estimates in the record, and that the rates fixed, even with incentive increments, were within the range of cost estimates. "Its difficulties, while not minor, did not stem from any failure to seek answers." 417 U.S. at 318, referring to n.48 at p. 313. That single sentence is a capsule of the requirement of reasoned decisionmaking in the context of the novel and exigent problem of seeking to enhance natural gas supply in time of dire shortage while maintaining fairness to consumers.

1. *General FPC approach*

Instructed by these Supreme Court guidelines, and pretermitting discussion of specific contentions, we refer for perspective to the Overview provided by the FPC of its approach. At the outset: "This rate is fully cost-based and justified. Additionally, non-cost factors have

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[11] 417 U.S. at 331.

[12] Pub. Serv. Comm. of N.Y. v. FPC, 167 U.S.App.D.C. 100, 108, 511 F.2d 383, 346 (1975) (advance payments remand).

been examined to ensure that the cost-based rate is just and reasonable." (Opinion 770 mimeo at 1-2, R. 2497). The cost factors included "drilling productivity, drilling costs and all of the other costs associated with the production of natural gas." The non-cost factors included "the price of competitive fuels, the impact upon supply and demand, inflationary pressures, the nation's natural gas shortage and conservation factors." (Mimeo at 3, R. 2499).

Costs were determined by "a discounted cash flow analysis by costing the average successful well that is drilled in the test year 1976." A 15% rate of return was allowed.

The discounted cash flow analysis used in Opinion No. 699-H and approved in the *Shell* opinion was modified in certain respects. Drilling costs were changed to reflect higher costs actually incurred during 1973 and 1974. The productivity data were expanded from 7 years (1966-1972) to include the reports for 1973 and 1974. The depletion life was changed from 18 years to 15 years (with a pre-production period of 3 years). In view of the repeal of the percentage depletion allowance, a provision for income taxes payable was inserted, at the marginal tax rate of 48%.

Opinion 770's Overview concluded by allocating the $1.5 billion added to consumers' costs in the first year (later adjusted in Opinion 770-A). "Of this amount, approximately 55% goes to the Treasury in higher taxes, 25% compensates for higher costs, and 20% accrues to the producers. Over the longer run, we expect consumers will benefit as a result of reduced reliance on expensive alternate fuels. We believe that this decision will lead to increased gas supply and to greater gas conservation." Mimeo at 5, R. 2500.

2. *Examination of reasons and changes*

These general statements are only prologue. With all the latitude for expertise and specialization of the agency, the court must still probe the essential particulars—to assure itself that the Commission has seriously sought answers and engaged in reasoned decision-making.

The court has been particularly alert to consider those aspects in which the FPC's approach differs from what has been approved. An agency may of course reconsider its approach even in the absence of any new evidence. *Mobil Oil Corp. v. FPC*, 417 U.S. at 320. However, the change in policy must be avowed and reasoned.

> An agency's view of what is in the public interest may change, either with or without a change in circumstances. But an agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior precedents without discussion it may cross the line from the tolerably terse to the intolerably mute.

Greater Boston TV v. FCC, 143 U.S.App.D.C. at 394, 444 F.2d at 852.

3. *Experimental and dynamic features of novel regulation*

When regulation features novelty, in subject, technique or both, the narrow scope of review established by conventional doctrine is further circumscribed. Thus *Permian* noted that the court tempers its review to take into account the "unusual difficulties" of the first proceeding. Alongside was the countervailing caution that the force of this restraint lessens as the Commission has time and opportunity to gain experience and make adjustments. *See* 390 U.S. at 792, quoted above. *See also Shell Oil Co. v. FPC*, 520 F.2d at 1071, and cases cited.

These considerations were stressed in *Shell* on review of Opinion 699-H, the first nationwide rate order. The court used the metaphor of "kid glove" review as appropriate circumscription in view of the "experimental nature" of the regulation. 520 F.2d at 1071. Extra deference is provided when the Commission articulates a tentative balance on an issue, announcing that it is "prepared to reevaluate the equilibrium it sought to achieve in the biennial review." 520 F.2d at 1077.

Yet the Fifth Circuit took occasion to sound a caution against the FPC's assumption that it could continue to support essential elements of its orders "with little more than ipse dixit." The court said: "We must regret, however, that the FPC continues to issue orders which would be inadequate but for our 'kid glove' treatment. * * * [a] cautionary note should indicate that as experiment lapses into experience, the courts may well expect the Commission to justify its policies with reasoned projections of that once-prototypic policy's probable net effect." [13]

In this posture of matters, the court's rule may require it to affirm an order regardless of misgivings, but to discharge the function of identifying problem areas that call for reconsideration and that cannot be affirmed in subsequent proceedings in the absence of reasoned support grounded in experience.

The underlying principle is broader than natural gas regulation. The en banc opinion in *American Airlines v. CAB*, 123 U.S.App.D.C. 310, 359 F.2d 624 (1966) presented a judicial approval of the blocked space program as reasonable in projection, taking into account the agency's capacity and duty to provide reappraisal in the light of experience. (And see p. 633: "a month of experience will be worth a year of hearings.") In *United States v.*

[13] *Shell*, 520 F.2d at 1072.

CAB [*American Airlines et al., ALPA, et al.*], 167 U.S. App.D.C. 313, 511 F.2d 1315 (1975), the court upheld an October 1973 CAB order approving an air carriers' agreement for capacity reduction as interim or emergency action, but it set aside the July 1974 order of the CAB extending its approval because of the agency's failure to provide continuing consideration of the matter on a non-emergency basis.

The principle has full vitality, however, in the field of natural gas regulation, as is dramatized by this court's actions concerning the FPC's program for advance payments to gas producers. In 1972, this court sustained the order as a "justifiable experiment in the continuing search for solutions to our nation's critical shortage of natural gas." *Public Serv. Comm. of N.Y. v. FPC*, 151 U.S.App.D.C. 307, 467 F.2d 361, 371 (1972). The court stressed the need for further evaluation. Subsequently, this court held that the FPC had failed to engage in meaningful review, analysis and evaluation of experience under the program, and declined to affirm an extension, *Public Serv. Comm. of N.Y. v. FPC*, 167 U.S.App.D.C. 100, 511 F.2d 338 (1975). On remand, the FPC terminated the program as of the end of 1975.

The need for flexibility and reevaluation is underscored by the nation's wide-ranging and comprehensive reevaluation of energy policy. There is no direct impact on the legal issues before us. Yet the reviewing court acts as a court of equity in appraising the need and method of further consideration of issues. *See Mobil Oil Co.*, 417 U.S. at 311. Equity historically takes into account changing circumstances. In present context, these may come to include revision of the structure and functions of the Commission whose orders are under review.

In the light of this broad perspective, we turn to the more particular contentions raised by the consolidated petitions for review.

II. Procedural Issues

With varying emphases, the consumer interests have attacked the procedures used by the FPC. The basic question is whether the notice-and-comment procedure of informal rulemaking is permissible for an enterprise of such magnitude and complexity. This issue has been given special attention. Our discussion appears in the opinion of Judge Fahy which approves the FPC's basic procedural approach.

The residual possibility that its procedure may have been inadequate as to particular issues is subsumed under separate sections of this opinion, dealing with the evidence and reasoning pertinent to those issues.

Similarly those sections necessarily reflect the court's consideration of the contention that even where the agency is not required to institute more than a minimal notice and written comment procedure, the court may call for additional procedures as an adjunct enabling it to perform its task of providing "meaningful judicial review of highly technical issues." [14]

The producer interests have raised a different issue of procedure, focusing on whether there has been a Congressional role that has undermined the validity of the adjustments made by the FPC on reconsideration. This issue has also been given special attention in the opinion of Judge Fahy for the Court, in which we reject the producers' contention that the Commission is disqualified to issue Opinion 770-A.

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[14] Pickus v. U.S. Board of Parole, —— U.S.App.D.C. ——, 543 F.2d 240, 246 (1976); Portland Cement Assoc. v. Ruckelshaus, 158 U.S.App.D.C. 308, 486 F.2d 375 (1973), *cert. denied* 417 U.S. 921 (1974). This doctrine is implicit in FPC v. Transcontinental Gas Pipe Line Corp., 423 U.S. 326 (1976). It can be furthered by a remand leaving the order in effect and possibly by a remand of only the record, as contrasted with a remand of the case that vacates the order. *Pickus II*, 543 F.2d at 246, n. 24.

III. Reinstatement of Vintaging to Avoid Excessive Profits

We begin discussion of specific objections to the rate order with the producers' threshold-type contention that the orders are invalid in providing for a vintaging approach, establishing separate rates for 1973-1974 biennium gas and for 1975-1976 biennium gas.

The underlying premise of the producers is that natural gas must be regulated as an irreplaceable commodity, not a service, and that vintaging compels the sale of natural gas at prices below the cost of replacing the gas consumed. This was rejected as long ago as the 1968 *Permian* opinion, where the Court accepted the Commission's conclusion that "a two-price rate structure will both provide a useful incentive to exploration and prevent excessive producer profits." 390 U.S. at 798. The Court accepted as consistent with the Act a two-price system adopted by the Commission on the premise of a lower price for sales where "price could not serve as an incentive" since any price "above average historical costs, plus an appropriate return, would merely confer windfalls." *Id.* at 797.

Subsequent to *Permian*, the FPC has issued orders diverging from concepts of vintaging, and these have been approved by the courts. Its Opinion 639 and follow-on interpretations, authorizing new rates as contracts expired, were upheld as a reasonable attempt to phase out "contract vintaging." [15] As we shall see in discussing the "rollover" matter the precise issues are different, but we acknowledge the parallels of theory. However, this is not just a theory, but a balancing of the interests of producers

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[15] Shell Oil Co. v. FPC, 491 F.2d 82 (5th Cir. 1974); Pub. Serv. Comm. of N.Y. v. FPC, —— U.S.App.D.C. ——, 543 F.2d 874, *cert. denied*, —— U.S. —— (1976).

and consumers. Like all issues of rate regulation the key questions are likely to involve "pragmatic adjustments." [16]

That brings us to the producers' proposition that Opinion No. 699-H's nationwide pricing exemplified a commitment to a single uniform national rate for all gas, and signaled the end of the "anachronism of vintaging." [17] The 1975 *Shell* opinion upheld the trend toward elimination of vintaging as within the latitude of agencies to reevaluate old experiments.[18]

The Commission has latitude to reconsider its experiment in abandoning vintaging. The producers contend that the problem of "excessive rents" was obviously before the Commission when it issued No. 699-H and there was no new evidence to make a difference. In Opinion No. 770, the FPC explained that its change of course was due to the "magnitude of the increase of the rate" prescribed for the post-1974 gas, leading the Commission to conclude it must "abandon its intended policy" and "vintage by a 1973-1974 cost grouping to preclude exaction of excessive and unjustifiable economic rent from flowing gas." (Mimeo at 12, R. 2507). It referred to Opinion 699-H, stating "we did not anticipate at that time such a dramatic increase in costs and decrease in productivity." (R. 2508). There was thus an explicit acknowledgment of change, no stealthy deviation.

This change, say the producers, is only a difference in degree from the situation before the FPC in 1975. Differences in degree may become so wide as to justify difference in outlook and response. It was within the policy

[16] Natural Gas Pipeline Co. v. FPC, 315 U.S. 575, 586 (1942); Mobil Oil Corp. v. FPC, 417 U.S. 283, 329 (1974).

[17] "This uniform price will constitute a recognition of the fact that gas is a consumable, irreplaceable commodity and not a service which can be renewed by man." 52 FPC at 1637-8.

[18] 520 F.2d at 1077-78.

latitude of the Commission, in its balance of interests, to emphasize, as it did here, its "responsibility to minimize severe and harmful economic dislocation due to increased rates." [19]

The producers say this approach is at odds with the function of rate regulation whereby the government simulates what would have been achieved in a free market. In support of this contention the producers cite, *inter alia*, *FPC v. Texaco, Inc.*, 417 U.S. 380 (1974). That is ironic because that opinion specifically held Order No. 428 was not vulnerable because it set different levels of just and reasonable rates for small producers and large producers. 417 U.S. at 390. Not unexpectedly the Court relied on *Permian*. In *Texaco* the Court rejected the contention that the Commission was free to rely exclusively on market prices when it was the legislative premise of regulation that there was no free competitive market in the oil and gas industry. Simulation of what would obtain in a free competitive market is a premise of rate regulation but often a speculative one, and one that is neither conclusive nor dominant over the need to strive with pragmatic adjustments for a fair balance of producer and consumer interests.

IV. Cost Allowance for Income Taxes Payable

We examine initially the Commission's treatment of the impact of federal income taxes on natural gas operations. The increment to price allowed for income taxes payable constitutes the largest portion of the increase in price over that allowed in Opinions 699 and 699-H. Opinion 770 allows 43 cents per Mcf to cover the cost of income taxes on gas within the 1975-76 biennium. This

[19] R. 2057, citing Area Rates for the Appalachian and Illinois Basin Areas, 48 FPC 1299, at 1309-10, *aff'd* Shell Oil Co. v. FPC, 491 F.2d 82 (5th Cir. 1974).

constitutes 26.7% of the total price of $1.61 and is somewhat less than the amount allowed for profits (48 cents).

The discounted cash flow methodology used by the Commission adjusts for the impact of the federal tax code in two ways. First, the model credits the producers with the value of tax benefits which the producers can obtain by deducting their various intangible drilling costs. The model assumes that these costs will be expensed at the earliest possible time, and that the producer of the model well will have other taxable income which these preproduction deductions could offset. In order to reflect the tax savings which the producer gains from a deductible expense, the model reduces the gross cash outlay for that expense by 48%, the statutory tax rate. Thus, when the net outlay is adjusted by the discount factor to obtain its present value, the consumer also gains the present value of the tax deduction.[20]

The second adjustment made by the Commission was to allow for the cost of paying income tax at 48% of profits. This, too, is discounted to obtain its present value. As previously noted, the increment to price consisting of an allowance to cover these taxes is 43¢.

We now turn to the consumers' objections, beginning with the generalized and moving to the specific.

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[20] Because the Commission's methodology fails to concretize the savings from tax deductions, and accounts for them only as a reduction from cash outlays, this method of accounting is somewhat difficult to understand or explain. However, it has exactly the same mathematical effect as a model in which the cash value of each deduction is magnified by the discount rate to obtain its present value, and then counted as a cash inflow in the overall alignment of cash outflows with cash inflows.

A. *Departure from Prior Policy*

The consumers challenge the Commission's treatment of tax effects on the ground that the Commission's methodology constitutes an unexplained departure from the methodology of Opinion 699 and previous Commission opinions.[21] In Opinion 699 the Commission had reduced costs to reflect tax credits generated by deductions but had allowed for the payment of income taxes only to the extent of those credits.[22] Where an individual producer incurred a tax liability in excess of his credits, he could petition for special relief, and could obtain it upon showing with his actual tax return that he had in fact paid tax. The consumers contend that the Commission's movement from the Opinion 699 procedure, which assumes that the producers will have no net tax liability, to the 770 model, which gives an allowance for income taxes at the statutory rate, constitutes an unexplained and unjustifiable change in agency policy.

We find no merit in this contention. As we have already noted, *Greater Boston TV Corp. v. FCC* holds: "An agency's view of what is in the public interest may change, either with or without a change in circumstances," as long as the agency changing its course supplies a "reasoned analysis indicating that prior policies are being deliberately changed, not casually ignored." 143 U.S. App.D.C. at 384, 444 F.2d at 852. In this case the Commission's modification of methodology is justified both because it is responsive to changes in circumstance and

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[21] The consumers cite Permian Basin Area Rate Proceeding, 34 F.P.C. 159, 206-07 (1965), *aff'd* 390 U.S. 747 (1968); Southern Louisiana Area Rate Proceeding, 40 F.P.C. 530, 585-86 (1968), *aff'd sub nom* Austral Oil Co. v. FPC, 428 F.2d 407, *cert. denied sub nom* Municipal Dist. Group v. FPC, 400 U.S. 950 (1970), as well as the opinions in the previous national ratemaking.

[22] See Shell Oil Co. v. FPC, 520 F.2d at 1081 (5th Cir. 1975).

because it is the product of a conscientious reexamination of the tax issue.

The Tax Reduction Act of 1975 [23] reduced taxes for most individuals, but was intended to increase taxes for the oil and gas industry.[24] Effective July 1, 1976, it repealed the percentage depletion allowance with respect to most producers,[25] and limited the use of foreign tax credits to foreign related income.[26] As the consumers recognize, the repeal of the depletion allowance will alone have a substantial impact on the producers' tax liability.[27] The Commission estimates that 27¢ of the 43¢ allowed for taxes is attributable to the repeal of the depletion allowance. Others might provide different estimates. But it is clear that this congressional action significantly affects the tax setting in which current drilling is taking place. In Opinion 770A, the Commission explained:

> That action required a reconsideration of the overall impact of the income tax law on the producer ratemaking methodology. The reconsideration of the issue revealed that the premises on which prior decisions were founded were inaccurate at the outset, eroded by change in law, or properly accounted for in the new gas costing model.

R. 3636.

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[23] Public Law 94-12, § 501(a), 89 Stat. 26 (March 28, 1975).

[24] An increase in producer liability is contemplated by 26 U.S.C. § 613A(b)(2)(B) (Supp. V 1975).

[25] *See* 26 U.S.C. § 613A(a) (Supp. V 1975).

[26] *See* 26 U.S.C. § 907 (Supp. V 1975).

[27] A study by the staff of the House Ways and Means Committee estimated that the Treasury revenue effect of the repeal of percentage depletion for oil and gas would be $1.7 to $2.2 billion in 1975 and $2.7 billion in 1976. Committee on Ways and Means, Summary of Major Provisions of Public Law 94-14, Tax Reduction Act of 1975, (April 1, 1975), cited in Opinion 770-A at 74, R. 3639.

This kind of thoroughgoing reexamination of the tax issue was by no means precluded by the analysis in Opinion 699 or in the judicial opinion affirming it. In *Shell Oil Co. v. FPC*, 520 F.2d 1061, 1081 (1975), the Fifth Circuit upheld the Commission's "policy choice" to exclude an average tax component on the ground that the variation of tax liability between individual producers was more significant than the overall industry liability. Reconsideration of this point was clearly necessary in light of the increase in producer liability under the 1975 Act. The Court then went on to say:

> The Commission also took note of the complexity of federal income taxes provisions for gas producers, the ability of producers in some circumstances to indefinitely postpone tax liability and the impending reduction of depletion allowances, all good reasons for eschewing a simple tax component which would be cemented into ratemaking for a long time to come.

These points were not cited in the *Shell* opinion as confirming the accuracy of the 699 model, but as reasons for eschewing a tax component which might unfairly become permanent. They did not preclude a new look in the light of the provisions of the 1975 Act that served to simplify [28] as well as to increase the producers' liability. The court's opinion is permeated with an awareness that the tax problems were in flux, and with a willingness to tolerate the Commission's tentative treatment so as not to preclude a more refined analysis in the future. This point was highlighted when the *Shell* panel issued an opinion on rehearing for the sole purpose of stating that its decision "should in no way be construed to foreclose a *de novo* review of federal income tax in the current biennial review proceeding in FPC Docket No. RM

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[28] By repealing the percentage allowance (which is calculated on a property by property basis) and by eliminating the spill-over effects of the foreign tax credit.

75-14." *Shell Oil Co. v. FPC*, 525 F.2d 1261, 1263 (5th Cir. 1976) (denying petition for rehearing).

In conducting its rethinking of the tax issue, the Commission took into account not only the changes in the tax code but also the increasingly grave shortage of natural gas disrupting our national economy. The Commission reasoned that "new supplies come from decisions to explore for and develop new fields," and the "[m]arginal income therefrom is likely to be taxed at the 48% rate." Opinion 770 at 85, R. 2580. Hence the Commission felt that it was particularly appropriate to include a tax component at the full statutory rate.

A commission may estimate costs on the high side of a practical range and still stay within the limits of reasonableness. That is the message of *Permian* and *Mobil*, particularly taking into account the need to conduct cost-based ratemaking with due regard for the non-cost factor of encouraging exploration for natural gas.

Were this court to construct a methodology for national ratemaking, we might find it more elegant and theoretically proper to include such incentives for exploration solely within the factor for rate of return. But that is not our task, and we cannot say that the Commission was arbitrary or capricious in taking account of this public need within the context of its calculation of the tax component.

We recognize that not all of the 43¢ increase in allowance for taxes can be explained by changes in circumstances. Some part of it is undoubtedly due to the change in method of accounting. But the judicially enforced requirement that the agency explain any changes in policy is not intended to bind the agency to prior methods. As circumstances change and analytical techniques improve, methods of accounting which once seemed sound enough to guide agency action may be perceived as imperfect.

Precedent cannot be allowed to block the search for a model more reflective of economic reality. Here, where the agency had both meaningful reasons for changing its methodology and, as we develop more fully below, a logical explanation for the new approach it adopted, the law does not hold the agency fast to its prior policy.

B. *Use of an Economic Model*

As a second objection to the Commission's treatment of the tax component, the consumers contend that there can be no substantial evidence supporting an allowance for income taxes unless the producers' current tax returns are put into evidence and subjected to comment. APGA complains that "the producers prefer to rely on economic models, which tell you nothing about the real world . . ." Brief at 38 n.2. Elsewhere APGA aserts "Economic 'models', dreamed up by producer-sponsored consultants and untested by cross-examination, do not begin to rise to the status of 'substantial evidence.'" Brief at 41 n.3.

With this contention we must express fundamental disagreement. Reasoned decisionmaking can use an economic model to provide useful information about economic realities, provided there is a conscientious effort to take into account what is known as to past experience and what is reasonably predictable about the future.

In the world of today, model-building is not merely a sport for youngsters and tiny planes. Models are central to the forecasts and programs evolved by members of the executive and legislative branches, concerned with such searching questions as inflation and stabilization, production and unemployment, and other problems of national policy. These economic models are robed in the elegance of high-speed computers, but they are at base extrapolations from past experience, projections that must undergo continual examination and revision. They do not always

have the reassuring concreteness of empirical observations, but they are the best we have to work with in casting our programs. Provided that the assumptions on which a model is based are adequately explained and justified, we see no reason why this type of evidence may not be used in support of a ratemaking application.

The Supreme Court has emphasized that the Commission must have considerable latitude in developing a methodology responsive to its regulatory challenge:

> We must reiterate that the breadth and complexity of the Commission's responsibilities demand that it be given every reasonable opportunity to formulate methods of regulation appropriate for the solution of its intensely practical difficulties.

390 U.S. at 790. In *Permian* and subsequent decisions, courts have approved the use of regional and national averages, which include a hypothetical cost projection for some producers, as a means of arriving at a reasonable individual rate. *E.g., City of Chicago v. FPC*, 147 U.S. App.D.C. 312, 337, 458 F.2d 731, 756 (1971), *cert. denied*, 405 U.S. 974 (1972). More recently, the Fifth Circuit sustained the use of a discounted cash flow methodology as a basis for national ratemaking. 520 F.2d at 1079-80. In each of these cases the key question was not the extent to which the Commission methodology consisted of empirical observations, but whether its premises were supported by substantial evidence and whether its reasoning was sound. These are the demands which are appropriately made of the Commission in this case.

Further, in the context of this particular ratemaking, the Commission's use of an economic model to estimate tax liability reflects a well-reasoned choice of methodology. The Commission specifically found that because of the percentage depletion allowance and the low return on investment prior to this ratemaking, "it is very unlikely

that any meaningful historical average tax would be derived" from a study of the producers' tax returns. 770-A Mimeo at 65, R. 3630. There is substantial foundation for this as a reasoned conclusion when one considers that the tax return reflects an aggregate of matters, and that it would be well nigh impossible to undertake the task of segregating gas operations from oil operations, operations involving jurisdictional gas from those involving nonjurisdictional gas, associated gas from nonassociated gas, and then differentiating between the various vintages of nonassociated jurisdictional gas. Given the clear need for an allowance to cover the liability imposed by the 1975 Act, and the difficulty—if not the impossibility—of obtaining a meaningful tax figure from an historical study, the Commission was clearly justified in seeking to account for taxes through the use of a model.

The consumers would condemn the Commission's effort to estimate the producers' tax liability on the ground that the Commission has departed from the well-settled principle of regulation that rates provided to cover tax costs must be based on "actual taxes paid." The consumers interpret this principle to mean that an increment for taxes may be included in the price only after tax returns have been used to demonstrate tax liability. This involves misunderstanding of the case law dealing with that principle. Although there are a number of cases in this area,[29] we may usefully proceed from the summarizing discussion in *City of Chicago v. FPC*, 458 F.2d at 754-57 (1971). There we explained that the producers had for a long time argued that the proper tax element of their rates was the tax that would have been paid but for certain deductions, chiefly those for

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[29] *E.g.*, Cities of Lexington, Ky. v. FPC, 295 F.2d 109 (4th Cir. 1961); El Paso Natural Gas Co. v. FPC, 281 F.2d 567 (5th Cir. 1960), *cert. denied sub nom* California v. FPC, 366 U.S. 912 (1961).

depletion, intangible expenses and accelerated depreciation. The producers contended that because these deductions were intended to provide an incentive for participation in the production of a wasting asset, the companies should be allowed to retain any tax savings. The courts held, however, that since the ratemaking structure already included an allowance both for incentive and for depletion, the proper tax element was taxes actually paid. Tax savings were to be passed through the companies to the consumers.

The Commission's model is entirely consistent with this principle. At the very earliest date that the producers incur the cost of production, i.e. the pre-production expense of lease acquisition and drilling, the producers must reduce yield through a current credit for current tax savings. All applicable types of tax deductions are included. Hence, we find no deviation from the "actual taxes paid principle" in the Commission's use of an economic model.

In rate regulation there is no mystique requiring that expenses be actually "paid." Regulated companies are routinely permitted to set up reserves against the probable expenses of obligations undertaken now yet falling due in the future even when the amount of obligation is subject to revision—as in the case of a bus company that has switched from street car to bus operations and has an obligation to take up the street car tracks. Depreciation reserves are everywhere based on a service life that is only estimated and often exceeded; and while these have the safeguard of costs originally paid out, there is a substantial difference in rates needed to cover a current expense as against a fair return on plant in service. Thus, there is no historical basis for petitioners' simplistic interpretation of the "actual taxes paid" principle.

But even if that principle had been stated in the past as rigidly as petitioners suppose, it would not preclude a different approach by the agency for the future. During the years that the "taxes actually paid" doctrine emerged there was experience under the tax laws in being, and a forecast for the future rising to the level of strong probability, that to a large extent taxes would either never be paid, or would arise for actual payment in a future too remote for present acknowledgement. Given the workings of the compound interest table, or the equivalent discount tables, an event 40 years hence can be ignored for the present in many practical concerns. But the 1975 change in tax law announces a policy and determination that marks a significant change. Perhaps its exact consequences cannot be spelled out in mathematical detail, but the combination of the higher probability that substantial taxes will be paid and the likelihood that there will not be acquiescence in indefinite deferral of tax revenue makes a difference real enough to support a change in policy as rational.

In sum, the Commission's reliance on an economic model for computation of the tax component was consistent with regulatory theory and fully justified in light of the specific evidence available.

C. *Specific Objections to the Model*

The third type of argument pressed by the consumers against the Commission's treatment of the tax issue is that the Commission's model fails to account for several phenomena which are likely to reduce the producers' tax liability. We take these specific objections to the workings of the Commission's model most seriously, for in the absence of empirical confirmation of accuracy, we believe that the Commission is obligated to provide a complete analytical defense of its model—to respond to each objection with a reasoned presentation. Neverthe-

less, after careful study, we believe that the Commission's Opinions fully answer or account for all points raised by the consumers.

1. *Consolidated Returns*

The consumers contend that the Commission's model fails to account for any tax saving which may occur from the filing of consolidated tax returns covering both jurisdictional and non-jurisdictional activities. They argue that the Supreme Court's decision in *FPC v. United Gas Pipe Line Co.*, 386 U.S. 237 (1967), requires that the consumer receive the benefit of any reduction in taxes arising from the combination of jurisdictional gains with nonjurisdictional losses. The consumers point out that Commission opinions following a different course have never received judicial approval.[30]

The Commission responds that the *United Gas Pipe Line* decision, *supra*, did not mandate a specific formula for the allocation of tax savings but merely reversed a court of appeals[31] which had refused to defer to Commission discretion. In support of this interpretation the Commission cites the Supreme Court's second decision in the *United Gas Pipe Line* case, 393 U.S. 71 (1968), which again reversed the court of appeals,[32] this time for netting the losses of other affiliates against the non-

[30] In two cases involving pipelines, the FPC did not require the pipelines to reduce their rates to reflect tax savings from participation in consolidated tax returns, Florida Gas Transmission Co., 47 F.P.C. 341 (1972); Natural Gas Pipeline, 50 F.P.C. 789 (1973), but neither of these cases was appealed and one was the result of a settlement.

The same policy ostensibly was followed in Opinion 699, but because no allowance for tax liability was included, that aspect of the decision was not appealed by the consumers.

[31] 357 F.2d 230 (5th Cir. 1966).

[32] 388 F.2d 385 (5th Cir. 1968).

jurisdictional gains of the United affiliate, without giving the Commission an opportunity to consider the issue. The Commission claims that it is within its discretion to hold that "regulated activities are properly viewed as a separate corporate entity and the Federal income tax allowance computed accordingly." Opinion 770 at 83, R. 2578 quoting Opinion 749-C.

We do not find it necessary to reach the legal issues raised by these arguments for we agree with the Commission that in the context of this national ratemaking proceeding, the savings which some producers may obtain from consolidation will not have industry-wide significance. Even the broadest reading of the decisions cited by the consumer interests could not reasonably preclude the Commission from making a net calculation on unregulated activities (setting losses off against gains from other nonjurisdictional activities) before combining the net figure with profits from jurisdictional sales. Thus, before a reduction of the tax component could be required, there would have to be a projection of a net nonjurisdictional loss on an industry-wide basis. The Commission specifically considered this possibility and dismissed it as neither supported by evidence nor "plausible" as a projection.

> [I]f any tax losses from non-jurisdictional activities are to be first allocated to offset non-jurisdictional profits, we would be required to find that the overall petroleum industry has sufficient tax losses to offset all income from production, refining, and marketing petroleum products and any other related or unrelated business activity. There is no evidence to support such a conclusion nor is it plausible.

Opinion 770-A at 83, R. 3648.

This is the kind of determination that must be challenged head on if at all, but we find no such challenge

by any of the petitioners. Hence we need not rule on whether or under what circumstances the Commission would be obligated to reduce "cost" of natural gas production because of nonjurisdictional loss.[33] We hold that the implausibility of net nonjurisdictional loss for the producers—at least in the absence of contrary evidence from the petitioners—renders unnecessary any inquiry into savings from consolidated returns.

2. *Increased Intangible Drilling Costs*

The next major criticism leveled by the consumers against the Commission model is that it does not fully take into account the tax savings which the producers may achieve by taking as deductions the higher intangible drilling costs which will result in future production. The consumers assert that the Commission's model of the cash flow of the average well operates "in a vacuum"—that the Commission assumes that the producer will be paying income tax on the revenues generated by that well when, in fact, those revenues will be offset by the deductions from the drilling of additional wells. APGA Brief at 47. Pushing the point a bit further, APGA visualizes "constantly increasing amounts of exploration and development in the future resulting in real resource growth . . . which would generate additional tax deduc-

[33] As for the possibility that the gas producers may suffer losses in a variety of non-jurisdictional non-gas operations, a possibility mentioned in Judge Fahy's opinion dissenting in part, there is no evidence, and certainly no substantial evidence, that the producers seeking diversifiaction (a kind of industrial "insurance") and higher profit will be losing money individually, let alone on an industry-wide scale. But beyond that, we are not aware of any principled basis for saying that natural gas consumers should pay less for gas simply because the unlikely hypothesis materializes and, say, Mobil Oil loses money in its Montgomery Ward investment.

tions" (APGA Brief at 48), and the Public Service Commission of New York refers to the possibility of "a series of staggered deferrals result[ing] in a permanent reduction in the company's tax obligations." N.Y. Reply Brief at 24.

The Commission addressed itself to this consumers' contention. Initially, in Opinion 770, the Commission put it that increases in unit costs arising from inflation or decreased productivity would be reflected in the rate calculations for subsequent biennia and that an assumption of constantly increasing real resource growth for the industry was unrealistic. Opinion 770 at 84-5, R. 2579-80. On reconsideration, in Opinion 770-A, the Commission articulated its position that the validity of its model is not dependent on assumptions about the real resource growth of the industry, one way or the other.

> Further consideration leads to the conclusion that the methodology employed in Opinion 770 takes account of all future increases in intangible drilling costs deductions *whether caused by increasing unit costs or real resource growth.* (emphasis added)

Opinion 770-A at 78, R. 3643.

In explaining this conclusion the Commission stressed that its model gave the consumer the full time value of every tax deduction, and that as the model was applied in future biennial ratemaking proceedings, the consumer would fully recoup any tax savings which the companies had gained from increased expenses:

> Whenever a producer makes future investment for the exploration or development of new gas, the value of the tax deductions resulting therefrom will be subtracted from the gross outlays used to compute the just and reasonable rate for gas from wells drilled at that time. Thus the time value of the deferral in tax liability obtained by that investment will be returned to the consumer through the price of that gas,

> consistent with the decision in Alabama-Tennessee Natural Gas Co. v. FPC.

Opinion 770-A at 78, R. 3643.

The soundness of this position of the Commission is reflected in the opinion of Commissioner Smith. Although he disagreed with several of the Commission's other major conclusions, he concurred in the Commission's treatment of taxes. His concern lay only in the need for assurance that there be forward consistency in this income tax analysis to assure reasonableness of future rates:

> It is mandatory that this treatment of the income tax deductions continues in the future. If the methodology were changed in the future to account for the value of income tax deductions on a capitalization or "carry-forward" basis, as was argued in this proceeding, the future rates would be unduly and unjustly biased upward.

770-A Dissenting Opinion at 3, R. 3814.

After careful study, we conclude that the Commission's discounted cash flow methodology fully accounts for any tax savings from potential increases in intangible drilling costs. Initially, we consider the APGA's assertion that the Commission model operates "in a vacuum." If this is only another way of saying that rate regulation can never proceed by constructing a model, we merely reiterate our prior discussion. If this means that the particular model has the defect of treating test period production in isolation from the rest of producers' activities, it is inaccurate. Opinion 770-A at 79, R. 3644. The model well postulated by the Commission's methodology produces no revenues during its preproduction years, yet the analysis assumes that the expenses generated in those years yield a current tax savings, in other words, assumes there will be other

income, and that the tax due on that other income will be reduced.

In this way the model takes into account the interaction between wells with overlapping lifetimes. Assume, for example, that *Well I* has reached its productive period, and is producing taxable income. During this period drilling for *Well II* is commenced, and intangible drilling costs are incurred in connection therewith. It is true that the tax deductions generated by *Well II* may be applied against the income from *Well I*, and may reduce or eliminate the tax liability for *Well I* during those years. It is also true that this savings will not be reflected in the rate calculation for *Well I*. But because the model assumes that preproduction deductions will be used to offset income from other activities, the tax savings from the overlap of the two wells will be reflected in the rate calculation for *Well II*. Moreover, because the model recognizes the full time value of this savings, the consumer gains the full benefit of the deferral of the tax obligation.[34]

Once this fundamental point is understood, it is easier to see why the reasons for increases in intangible drilling costs are irrelevant to the validity of the model. If for some reason the unit cost of drilling increases, it will produce a larger tax savings per Mcf and that larger tax savings will be reflected in the rate calculations for gas from the wells that are being drilled. This point is entirely sound, and recognized as such in the thoughtful brief filed by the New York Public Service Commission.[35]

Even projecting there may be no change in the unit cost of drilling for gas, and that there will be an in-

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[34] See page 30 and n. 20, *supra*.

[35] N.Y. Brief at 18.

crease in gross tax deductions arising solely from real resource growth in the natural gas industry, the consequent tax savings would still be reflected in ratemaking under the Commission methodology. In that circumstance, the tax saving reflected in the price of each Mcf of gas produced in future biennia would not be any greater, but because there would be more Mcf of gas produced and sold, the greater aggregate tax savings would be fully recouped. In short, under the Commission model every time a tax deduction is taken, the value of the savings is noted, increased to reflect its value over time, and reflected in the price of subsequently produced gas.

The Commission's methodology is fully capable of handling a long series of tax deferrals. In the same way that the Commission's model adjusts for the tax savings from the interaction between Wells I and II, it can adjust for any further savings resulting from the interaction of Wells II and III, and so on. Because the model adjusts for the savings from each incremental deferral, it provides adjustment for the aggregate impact of an entire series of staggered wells.[36] As long as the methodology is consistently applied, the producers will have no "savings" from taxes that do not also inure to the benefit of the consumers.

One caveat is critical. The fairness of the Commission's methodology depends directly on the assumption

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[36] The consumers put it that the tax model might be confronted with an infinite series of tax deferrals. This is conceptual, and not sufficiently probable to warranted extended consideration. But even in that extreme situation, the Commission methodology would not break down. The value of each successive deferral would be reflected in lower rates for the gas produced in subsequent biennia. For discussion of the consequences of future deregulation, see pages 49-50.

that it will be consistently applied in future biennial ratemaking proceedings. If the Commission were to adopt some other method of accounting which failed to adjust for the full value of current deductions, the producers could indeed achieve a tax "savings" that is permanent and would not inure to the benefit of consumers.

We revert to Commissioner Smith's observation, concurring in the treatment of taxes, but noting that "continuity of methodology . . . is an essential underlying premise of the rate established herein." R. 3814. We stress that our approval of these rates is conditioned on the continuation of such treatment. We see no need to spell out in this opinion the operation and consequences of this condition. It suffices to say that any new biennial rates that did not adjust price for the full time value of tax deductions taken, but not previously accounted in offsets for the benefit of consumers, would be "arbitrary and capricious."

One possibility of a "windfall" for producers is the prospect that in the not too distant future regulation of producers' gas rates may be discontinued. In that event, there would be no ongoing opportunity for a regulatory commission to assure that tax reserves already treated as an expense but deferred will be captured for the benefit of consumers. As to this, perhaps all that can and need be said is that though a system of regulation may be revoked tomorrow, while it is here today it must use the premise of continuing regulation as the only rational anchor.

Neither the agency nor the court can fairly be required to speculate on whether there will be deregulation, of its how and when, or whether it can be accompanied by other measures assuring reasonable protection to the consumers at that time.

D. *Conclusion*

The FPC's previous treatment of the tax problem in Opinion 699 was deliberately left tentative for further consideration. The repeal of the depletion allowance necessitated a new approach. We are aware that the Commission's methodology yields a greater amount than the depletion allowance alone. The ultimate point is that the Commission's approach reflects a determination to be both comprehensive and fair. The Commission's need to set rates in 1976 means that it could not await the audit and analysis of tax returns under the new act. More important, the Commission made a reasoned judgment that it was implausible that historical tax returns would yield useful information about the tax liability accruing from 1975-76 jurisdictional gas. The Commission's model is designed to give the producer full compensation for any tax payments and the consumer the full benefit of any tax savings. It is a logical model, that takes into account all experience that is known and that can reasonably be anticipated.

* * * *

We have given the most respectful consideration to the views of our colleague Judge Fahy dissenting on this point, and to his concern that major oil companies may find ways of deferring taxes not presently reflected in the Commission model. Nevertheless, we think that the Commission's approach to this thorny issue is a reasonable one, and should be sustained at this time.

Implicit in much of Judge Fahy's concern is an assumption of losses in nonjurisdictional activities (and tax benefits from using those losses to reduce taxes due on jurisdictional sales). The Commission found it implausible that the producers as a whole would sustain losses in their unregulated activities while making gains in sales of regulated interstate gas. There is no evidence in the record to challenge that conclusion. It is

certainly not unreasonable to presume, in the absence of contrary evidence, that the sphere of unregulated prices is likely to be more profitable.

If there are other tax events that reduce the producers' tax liability, the parties can bring these to the attention of the Commission, so that its model can be refined. Our approval here of the basic framework of the Commission's model is not intended to preclude further analysis and adjustment. Indeed, we perceive no basis that would support a Commission's refusal to consider such information as may emerge regarding taxes paid, and the implications concerning the accuracy of its model. If this type of analysis can be achieved, and discloses a flaw in the model, the tax component can be adjusted as to future sales, just as the cost of service was adjusted for the 1973-1974 biennium for actual changes in productivity. And the quarterly escalation contemplated by Opinion 770 provides a rather obvious and simple mechanism for implementing such adjustments.

In sum we believe it would be unfair to deny to the producers any allowance for taxes at all because of uncertainty as to the precise liability they will shoulder. As Judge Fahy's own analysis demonstrates, the producers' tax returns pertaining to revenues from wells drilled in the most recent biennium would not be available until, at the earliest, 1977-78. The Commission's model obvitates the long wait for filing of returns, and the incredibly difficult task of calculating taxes on specific wells from overall returns.

If experience should develop defects in its methodology, for reasons that are not foreseen by the Commission or the court, at least on any basis now projected by consumer interests, that would be a reason for a different approach for the future. For the present, what we have conforms in full measure to the requirement

that the agency make a conscientious effort to seek answers, and apply its knowledge and analysis with reasoned decisionmaking.

V. Productivity and Gas Reserves

We turn next to the calculation of productivity, an issue both important and difficult.

We begin by voicing malaise. The FPC's support for its approach is thin, Commissioner Smith's divergent opinion suggesting modest modifications seems cogent, the Commission's rejoinder weak. Yet we admonish ourselves that ours is not the function of decision but of circumscribed review, limited to saying whether the presumption favoring FPC's reasonableness has been overcome, whether it has been shown that the FPC failed to seek reasoned answers.

The consumer interests charge that the FPC's course was a systematic determination to resolve all cost issues on the high side to get gas prices as close as possible to the intrastate level. The contention is that the FPC may not abdicate to the uncontrolled market, and may not reasonably act like a cat trying to chase its tail when the tail is free to go where it will. Yet courts rarely have basis for undercutting officials' statements of reasons by inquiring into subjective motivations.

Looking at objective data, we are constrained to find that there is a bare minimum to support the FPC's rulings. We can and do caution that on any future rate order there will be need for a more solid undergirding of result. That may be provided by the government's quest for more firm data on gas reserves. If a future proceeding is governed by a change in statutory ground rules whereby intrastate sales are controlled, the process may become more manageable and realistic. At this juncture we announce our approval, but with more of a sigh than a whoop.

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The Fifth Circuit's *Shell* opinion describes why "productivity" is a key application of a cost-based formula. *See* 520 F.2d at 1067. Productivity is an index that measures the amount of natural gas that will be added to reserves for every foot of drilling that results in some addition to reserves.

In FPC methodology, this factor (calculated for nonassociated gas)[37] determines successful well cost per Mcf. This in turn underpins determination of dry hole cost per Mcf, lease acquisition cost per Mcf, cost of other production facilities and other exploration costs per Mcf.

In this proceeding the Commission obtained its figures for the number of successful feet of drilling in the years under analysis from a publication of the American Petroleum Institute,[38] and there is relatively little controversy about those figures.

For data concerning the proven reserves discovered, the Commission relied on data supplied by the American Gas Association, a private association of natural gas producing companies. The AGA figures for "reserves added" in a given year are computed on a net basis: they include not only proven reserves newly discovered during the course of the year but also upward and downward revisions due to producer re-estimation of the extent of known proven reserves.[39]

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[37] That is, omitting data for "associated gas" produced as a by product of oil operation.

[38] *Quarterly Review of Drilling Statistics for the United States*, published by the American Petroleum Institute. The Commission notes that over the years there has been substantial agreement between these figures and those compiled by other reputable sources. Opinion 770 at 33 n. 75, R. 2528 n. 75.

[39] These "revisions" must be distinguished from "extensions" attributable to current development drilling.

In order to lessen the impact of year-to-year variation, the Commission did not focus on the most recent year for which productivity data are available (1975), but instead looked to a range created by two multi-year averages. Because the AGA data show a very substantial downward trend in productivity over the past 9 years, the producers urged that the FPC consider a relatively short multi-year period (*i.e.*, four-five years). The Commission, however, calculated average productivity for the past eight years (323 Mcf/ft) and for the past nine years (279 Mcf/ft) and then selected a figure at the center of that range (300 Mcf/ft) as the basis for its calculation of the national rate. Through the same methodology, the Commission settled on a figure of 373 Mcf/ft for 1973-74 gas, in lieu of the estimate of 485 Mcf/ft in Opinion 699-H.

The consumer petitions opposing the rate increase as excessive challenge the Commission's calculation of productivity at several levels. First, as the most basic level, they attack the FPC's decision to rely on unverified data supplied by an industry association. They point out that many of the members of the Southern Louisiana Subcommittee,[40] for example, are employees of the major natural gas producers, and are paid by those companies for time spent serving on the Subcommittee.[41] Petitioners charge that Subcommittee members responsible for reporting particular areas may have limited or no access to proprietary data, other than that possessed by the member's own employer,[42] and that there is no pro-

[40] The AGA data is compiled by the various area Subcommittees of the AGA Committee on Natural Gas Reserves.

[41] Petitioners quote portions of a memorandum prepared by the Federal Trade Commission's Bureau of Competition, released March 25, 1975, in support of this assertion. R. 1055.

[42] Brief filed on behalf of 3 Senators (Abourezk et al.) and 14 congressmen (Aspin et al.) at 26-27 (hereinafter "congressmen"). The FPC's own Staff Report on the Updated

cedure for verifying the estimates submitted by the reporters.[43] Because the Subcommittees work with confidential data, they meet in private, and except for isolated audits, there is no public or Commission access to the raw data.[44] The Commission concedes that it does not even know some of the assumptions on which the AGA estimates are based.[45]

Petitioners recognize that the Supreme Court approved the Commission's reliance on AGA data in *Permian*, 390 U.S. at 801 n. 78, but point out that then collection of that data could not have been biased by knowledge of the role it would play in industry rate-setting.[46] Petitioners point out that ever since the Supreme Court's decision made clear that AGA reserves added data would be used in the rate computation, those statistics have

31-Lease Investigation, issued June 21, 1976, explains: "Many instances can be demonstrated in the current study where producers who do not own interest in all the blocks in a field or who own no interest in any block in the field have reported the field reserves to the AGA . . . [T]he producer who has access to all the necessary geological and engineering data is not always the one who reports the block of field reserves to the AGA." R. 2448.

[43] Congressmen's Brief at 27, *citing* Bureau of Competition Memorandum.

[44] Congressmen's Brief at 23, *citing* National Gas Survey, Vol. I, Chap. 5, (Preliminary draft issued in advance of Commission approval) (no date).

[45] In response to the argument that the AGA historical data did not take into account the increase in feasible reserves resulting from a significant increase in price, the Commission replied, *inter alia*, "we do not know what rate-cost factors have been assumed in initial reserve addition estimates." Opinion 770-A at 52, R. 3617. The FPC Staff Study on the 31 Lease Investigation, *supra* note 6, also disclosed "There is no standard procedure for determining the exact date of a field discovery" and that neither the AGA nor the reporting producers follow the exact AGA definition. R. 2461.

[46] Congressmen's Brief at 20.

shown a marked decline.[47] Although petitioners do not offer an alternative set of data, they argue that industry data collected after *Permian* and not subject to Commission verification are an inadequate basis on which to fix a new national rate. Petitioner APGA puts it: "Nothing short of a full investigation and independent audit by the Commission's staff of all industry reserves and drilling data and an evidentiary hearing at which the consumers and Staff are permitted to cross-examine those who prepared this data will suffice to remove the taint from the present industry figures. . ." [48]

The Commission implicitly acknowledges that the informal industry reporting system is not the most desirable source of data, but explains that its own efforts to collect such data by means of compulsory forms have been stayed by court order.[49] *See Union Oil Co. of Calif. v. FPC*, 542 F.2d 1036 (9th Cir. 1976). In Opinion 770-A the Commission states:[50]

> We were faced with the choice of further delaying the issuance of the new national rate opinion until sufficient "in house" data could be gathered and used in this proceeding, or proceeding with the AGA and API data as done in Opinion No. 699. We concluded that the judicious use of this data and the prompt issuance of Opinion No. 770 would be better than further delay.

[47] The Brief of the APGA, at 58-59, highlights the relevant figures. In the years 1955-68, reported nonassociated gas reserve additions ranged from a low of 11,449 Bcf in 1960 to a high of 18, 294 Mcf in 1965. In 1968, the year of the Supreme Court's *Permian Basin* decision, the reserves added figure was 12,335 Bcf. The following year it dropped to almost half, 6,875 Bcf, and the annual AGA figure has not since returned to the 5-digit level.

[48] APGA Brief at 66.

[49] Opinion 770-A at 42, R. 3608.

[50] Opinion 770-A at 44, R. 3609.

The Commission argues further that it did not simply accept the AGA data without question, that it diligently examined such data to assure its reasonableness. In support of this contention it cites the Report of the staff of its Bureau of Natural Gas on the Updated 31-Lease Investigation [51] and the National Gas Reserves Study of 1973.[52]

We are reluctant to approve the AGA data series, for we recognize the problems created by the Commission's reliance on essentially unverified industry data. But, under the circumstances, we do not find the Commission approach unreasonable, as a provisional response pending independent derivation of data. The Commission's choice to use the best available data, and to make whatever adjustments appeared necessary and feasible, is within its competence. "Courts 'cannot fairly demand the perfect at the expense of the achievable.' " [53] While we would

[51] Staff Report on the Updated 31-Lease Investigation, Docket No. RM 75-14 (June 21, 1976), 41 F.R. 26573. The Commission emphasizes the Staff's conclusion that "the estimates in total are reasonable." R. 2447. The petitioners argue that this statement must be read in context, in light of the following sentence that states that there was only a minor difference in totals for the 19 fields on which the staff, producer and AGA all had reserves estimates for 1971-72 discoveries, and that this conclusion was not intended to apply to those fields on which the AGA failed entirely to include a report within the time period. Because of the ambiguity in this particular conclusion, we do not rely on it. Nevertheless, we note that the Staff report did not recommend against use of the AGA data, but rather spoke of the need for some form of trending or averaging.

[52] National Gas Reserve Study, A Staff Report, prepared by the FPC Staff for the National Gas Survey, revised September 1973. Congressmen pointed out that this study covers only reserves proven through 1970.

[53] Pub. Serv. Comm. of N.Y. v. FPC, 167 U.S.App.D.C. 100, 108, 511 F.2d 338, 346 (1974) (advance payments).

expect the Commission to use its own revised procedures to gather data for the next national ratemaking proceeding,[54] at this juncture we cannot hold that, given the context of the FPC's efforts at and program for further analysis and cross-checking, the AGA date is so devoid of substance that it cannot serve as "substantial evidence."

At the next level, petitioners argue that there are specific inaccuracies in the AGA statistics which call for their rejection or for additional adjustments. Petitioners cite several studies, including a study prepared by the Bureau of Competition of the Federal Trade Commission,[55] a House of Representatives subcommittee staff study,[56] and the BNG study on which the Commission also relied.[57]

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[54] The Ninth Circuit prevented the Commission from using Form 40 to gather data on the grounds that the record lacked sufficient evidence to overcome the producers' contention that a reservoir-by-reservoir accounting was unduly burdensome. Union Oil Co., *supra*, at 1042-44. The court also found that the Commission had not sufficiently justified its provisions for public disclosure of the data. 542 F.2d at 1044-45. These objections do not appear to be of the kind that would preclude other Commission efforts to collect data on the growth of proven reserves, and we note that the Commission presently has this matter under its consideration.

[55] Staff Memorandum to the Federal Trade Commission in American Gas Association, et al., File No. 711-0042 (March 25, 1975). The entire memorandum is not in the record, but portions are quoted in Appendix 1 to the Initial Comments of the APGA, R. 1052-1057.

[56] Hearings on Natural Gas Supplies Before the House Subcomm. on Oversight and Investigations of Comm. on Interstate and Foreign Commerce, 94th Cong., 2d Sess., January 21, 1976 (testimony of Dr. John Galloway).

[57] Staff Report on the Updated 31-Lease Investigation, Docket No. RM 75-14 (June 21, 1976), 41 F.R. 26583.

According to the BNG study, a principal source of inaccuracy in the AGA data is that new reserves are often not reported in the year of their discovery.[58] As a result of this "lag" in reporting, the AGA "reserves added" figure for a given year will not reflect all the discoveries made in that year. However, it may include reserves actually discovered in a prior year. Hence, as the Report points out, the use of multi-year averages tends to minimize the impact of any lag in reporting.[59] In light of this analysis, the Staff did not recommend the rejection of the AGA data, but rather cautioned that the AGA figures be used with "discretion," and commended the Commission's past use of multi-year averages.[60]

In Opinion 770, the Commission acknowledged the utility of the multi-year average in accounting for misreported discoveries and, in fact, chose to look at a longer period than that used in Opinion 699.[61] For that earlier national ratemaking proceeding, the Commission had initially projected a range from 7 to 10 years,[62] but had ultimately settled on a 7 year period as the basis for its productivity calculation.[63] This choice was upheld in *Shell*.[64] As already noted, Opinion 770 selected a figure midway in the 8 to 9 year ranges. Thus, the Commission did grapple with the problem, and made an attempt to reduce the impact of any lag in reporting additions to gas reserves.

A second potential source of inaccuracy identified by petitioners is the inclusion of revisions in the AGA re-

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[58] R. 2447.

[59] R. 2448.

[60] *Id.*

[61] Opinion 770 Mimeo at 34-38, R. 2529-2533.

[62] 51 F.P.C. 2212, 2246 (1974).

[63] 51 F.P.C. at 2281.

[64] *Supra* note 5.

serves added data. As the Commission stated in its Opinion 699: [55]

> A significant factor in the decline [in reserve additions] is the sharp increase in net negative revisions to existing nonassociated gas reserves that was first reported in 1969 and which has continued to this day.

The AGA figures show that the first year in which the net revisions statistic was negative was 1969,[56] and that for the eight year period 1968-1975, negative revisions exceeded positive revisions by 7,502 Bcf.[57] These net negative revisions reduce productivity for a given year even though some of them may be adjustments to reserves discovered in prior years.

The Commission has recognized this potential deficiency in its revision data, but concluded that revisions are an "important piece of information." [58] The Commission points out that, to the extent that the revisions relate to discoveries made in a year covered by the data series, the inclusion of these adjustments is necessary to obtain an accurate picture of reserves added during the multi-year period. But because the AGA does not identify the year to which the revisions relate, it is impossible to tell which revisions should be included in the multi-year average.

Faced with a difficult choice between utilizing revision data to adjust historical figures or excluding it altogether, the Commission decided to incorporate these adjustments. This was upheld by the Fifth Circuit in *Shell*, 520 F.2d at 1079. We do not find warrant for reversal at the present time. We expect, however, that the Commission

[55] 51 F.P.C. 2212, 2247 (1974).

[56] Opinion 699, 51 F.P.C. 2212, 2342 (Appendix A).

[57] Opinion 770-A at 49, R. 3614.

[58] Opinion 770 at 143, R. 2638.

will make efforts to improve the quality of the revision data. It has not been asserted that this would be impossible, either by identifying the years to which the specific revisions relate, or in a more general fashion, determining the extent to which the revisions relate to the current period.

Reviewing the Commission's productivity calculation as a whole, we find that the comments of the parties and its own staff studies provided minimally adequate evidence to support its use of the 300 Mcf/f figure. Petitioners protesting the increase have identified some deficiencies in the data used by the Commission,[59] but these potential inaccuracies do not undermine the Commission's basic conclusion that productivity has declined substantially over the past decade.

[59] In addition to the arguments discussed in text, petitioners make two further points. First, they argue that the Commission erroneously computed the average productivity for the 8 and 9 year periods by dividing the total drilling footage by the total reserves added during the multi-year period, rather than using an average of annual averages. The Commission's method of calculation, say the challengers, gives too much weight to recent years in which the drilling footage was larger. That calculation is undeniable. But whether sound statistical theory counsels an average of averages, rather than such a weighting, is too debatable for us to lay down a choice either way as mandated by law. It lies within the realm of policy latitude.

A second contention of petitioners is that the Commission failed to take into account the fact that the increase in price contemplated by Opinion 770 will itself increase the reserves whose recovery is economically feasible. Here again, the Commission did consider this point, and did seek answers, but found no means of adjusting historical figures to take this projected effect into account. Opinion 770-A at 55, R. 3617 As in so many issues of government, it is easier to state the problem than a solution. Petitioners provide no compelling answer.

We take into account the Commission's attempt to correct for the weaknesses of its data by using an 8-9 year average, as a means of minimizing any lag in reporting or misreporting of reserves. We cannot say the Commission has failed "to seek answers." *Mobil Oil*, 417 U.S. at 318. And we cannot say at the present juncture either that the Commission's determination is irrational or that the underlying data are too insubstantial to permit the agency to grapple with the serious problems of covering the costs of natural gas in a time of gas shortage and declining productivity.

Further adjustment of the AGA data might have been desirable even at this time. Commisioner Smith provided an analysis concluding that revisions should be excluded and that reserves added data should be lagged one year behind drilling footage. These comments appear to have force, but they are more for consideration by the agency than dictation by the court.

Petitioners attack the Commission's response as amounting in effect to a statement that a lag in reporting reserves is not provided because the agency is unable to quantify the lag precisely, and as contrary to the legal requirement that an agency use its best judgment to salvage the inadequate, rather than abdicate to recognized deficiencies. That does not end the discussion, for the Commission put it that in addition to the lag in reporting reserves (tending to increase costs) there was a lag in reporting drilling (tending to decrease costs). What is abdication to petitioners is prudent to the Commission, what to them is best judgment is to the Commission a wild guess. The matter is muddy, but in the end we are left with the view that we cannot say that petitioners have met their heavy burden of demonstrating refinements necessary for validity. We cannot say that the FPC was obligated to undertake these refinements, at least at this juncture.

We have also considered the petitioners' suggestion that this case be remanded to the Commission for further proceedings exploring the accuracy of the AGA data or the possibility of further adjustments. In that event, however, the producer petitioners point out that they would be entitled to refine other figures in the record with more current data showing cost increases. The problem is not insubstantial.[70] Additional proceedings, together with a second round of appeals would create additional uncertainty for the industry at a time when some stability is necessary to encourage growth. While our orders *pendente lite* have preserved the possibility of a contingent refund in the event of a judicial declaration of invalidity, the context of the national emergency bids us make such a declaration, one way or the other, if we fairly can, rather than hold matters in suspense. The kind of affirmance we provide will not prevent the Commission from taking corrective action in the light of new information, *see Mobil*, 417 U.S. at 311.

As for the impact of our ruling on future ratemaking, preparation for the ratemaking for the 1977-78 biennium has already begun.[71] The Commission is building an administrative record for its Form 40, to permit its gathering of direct information on producers reserves, rather than through statistical appraisal by the industry committee. While we do not rest on the point, we cannot ignore the possibility that future ratemaking may be governed by a new statute and may be conducted by a new agency.

The ultimate question is whether the finding and conclusion before us is minimally adequate under our cir-

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[70] The producers claimed at oral argument before this court that recently published JAS figures for actual drilling cost in 1975 showed a 20% increase. Transcript at p. 8, March 24, 1977.

[71] FPC Docket No. RM 77-13, 42 F.R. 13048 (March 8, 1977).

cumscribed power of review. It is our judgment that our review as a court of equity, concerned with the overall interest of justice, 28 U.S.C. § 2106, is best fulfilled by affirmance of the ruling under review at this juncture.

To sum up: We do not approve or embrace the AGA figures; we simply tolerate them for purposes of this proceeding. We expect that by the next biennium the Commission will have put into effect its own procedures for gathering reserves data. To the extent AGA data remain for consideration, we contemplate that the Commission will have acquired information to permit further adjustments to the data supplied by the AGA. In the specific circumstances of this proceeding, we find that the Commission's productivity calculation is adequately supported.[72]

VI. Attacks on National Approach to Costs and Prices

In this opinion we are accepting and affirming the Commission's course in prescribing nationwide ceiling rates based on composite nationwide figures of nationwide costs. Two objections have been leveled. Considered subsequently is the objection of producers in the Rocky Mountain area that their costs are higher, and therefore their ceiling prices should be higher.

A. *Failure to Distinguish Between Onshore and Offshore Gas Costs*

The objection that has given us distinct pause is the contention that "there is no validity to the Commission's continued insistence upon treating as a single gas source onshore gas subject to unregulated intrastate competition,

[72] The dissenting Commissioner concluded that productivity should have been 354 Mcf/ft rather than 300 Mcf. R. 2692. From the judicial perspective, the zone of reasonableness may well embrace both figures.

and offshore gas from the Federal domain over which the Commission exercises plenary authority and to which the interstate market must look for most of its new gas supplies." [73]

APGA and Congressmen press the objection as to all gas. New York presses it as to flowing gas, acquiescing in a $1.42 price for new gas on a noncost basis to seek onshore gas for the interstate market. Commissioner Smith's dissent to Opinion No. 770 questioned part of the upward revision in the 1973-4 biennium. Accepting the decision to "vintage" the 1973-4 natural gas, and the need for an income tax allowance for future delivery of that gas, his question was as to other costs. "The attempt to reconstruct an average 'actual' nationwide cost for 1973-74 results in compensating the producers for costs that, for the most part, were not incurred with respect to gas sold in interstate commerce." (Opin. at 11, R. 2693). He continues:

> [I]t would appear that the vast majority of that higher cost natural gas was intended for and sold in the intrastate market. [W]hen the Commission engages in retrospective compensatory ratemaking, should not costs actually incurred with respect to the particular gas that is being repriced provide the guideline for the repricing decision? (Id.)[74]

Starting with the most modest objection, there would be at least a substantial question whether the Commission has been arbitrary in raising prices to the consumers (for offshore as well as onshore gas produced during the 1973-4 biennium) if it develops that the underlying reason was really higher costs incurred on onshore gas,

[73] Quoted from p. 11 of brief of New York Public Service Commission.

[74] Commissioner Smith agreed that prospective rates should cover the "full marginal cost to the producer . . . else the position of the interstate market *vis-a-vis* the intrastate market would deteriorate even more."

and those costs had already been recouped by unregulated price increases in the unregulated intrastate market.

There is no doubt of the reality of higher prices in the intrastate market for all pertinent periods. Indeed, Opinion No. 770 itself reveals how intrastate prices had climbed by the first quarter of 1976, well before the issuance of Opinion 770,[75] to an average in excess of $1.50 per Mcf. By the time Opinion No. 770-A issued on Nov. 5, 1976, there was another jump in intrastate prices, not unexpected in view of the $1.42 price set in Opinion No. 770.[76]

In Opinion No. 770-A, the Commission addressed itself to the arguments of petitioners for separate pricing of offshore gas. The Commission challenged the implicit "assumption that onshore costs are higher than offshore costs. The cost analysis below indicates that the contrary is probably true." Mimeo at 138, R. 3703. The Commission's exhibits (#14 and 15) show that while offshore gas has "many times higher" productivity (1651 as against 196), it has higher drilling costs, dry hole costs and lease acquisition costs. The "bottom line" of these exhibits is an average cost of $1.63, with $1.51 for onshore and $1.84 for offshore. The FPC acknowledges that this 33¢ difference would be reduced "if, as some

[75] The data show an average price of $1.54 for new contracts with 57% of volume above $1.50, and $1.78 for renegotiated contracts, with 80% of volume in excess of $1.50 Mcf. Opinion 770, Exh. 27, R. 2609.

[76] The FPC informs us in another pending case, p. 31 of Brief filed Dec. 28, 1976, in #75-2105, APGA and Consumer Federation v. FPC, citing FPC News Release No. 22711, Nov. 4, 1976: "new contract rates for intrastate sales are now [1976] averaging $1.59, with 70% of those contracts at rate levels exceeding $1.51, and 7.4% . . . at rates between $2.01 and $2.50 . . . [R]enegotiated . . . intrastate contracts now [1976] average $1.66 per Mcf. 76% of those intrastate sales are at rate levels exceeding $1.51 and 9.3% are between $2.01 and $2.50."

parties claim, and the sparse UDC data indicates,[77] offshore rates-of-take are faster than those employed in Opinion No. 770 [which assumed a 15-year rate-of-take]. It concludes that "a split between onshore and offshore pricing, would lead to no appreciable differences." Mimeo at 139, R. 3704.

In this state of the record, the court cannot find a lack of either substantial evidence or rationality.[78]

However, we also acknowledge concern that the factor of rate-of-take, obviously a key consideration in the Commission's discounted-cash-flow methodology, is treated with a glancing reference to "sparse data" and the "guesstimate" of what it signifies. If the future brings parity in prices for intrastate and interstate gas, as is sought by the Administration's energy proposal to regulate intrastate rates,[79] the issue disappears for the future. If the future maintains marked differences between unregulated intrastate prices and regulated interstate prices, the Commission has a responsibility to give more

[77] Citing Exhibit 13 to Opinion 770.

[78] Opinion No. 770-A approaches the question broadly, without specific reference to Commissioner Smith's request in Opinion No. 770 for further exploration of the issue for the 1973-74 biennium. Mr. Smith's opinion in No. 770-A did not reiterate this question as an objection. Viewing the problem in context, as a portion of the 93¢/Mcf rate, we note that the upward revision for income tax factor brings the price set in opinion 699 up to 83¢/Mcf. Thus, the issue of offshore costs for the past biennium is at most 10¢/Mcf. By implication, the Commission's Opinion 770-A would support for the past biennium as well as for the future the gross estimate of no significant cost difference between onshore and offshore gas. The problem as to depletion period would require full reconsideration. We conclude it is not required as a matter of law for the past period.

[79] S. 1469, 95th Cong., 1st Sess. (Introduced May 5, 1977) (as to "new natural gas," as defined).

attentive consideration to the contention that it is arbitrary to average high costs for onshore gas [which recoup unregulated prices] and lower costs for offshore gas, for which there is a claim of an 8-year depletion period [80] and hence significantly lower costs.

The public interest contemplates a fair interstate price based on average cost, but it is questionable whether such an average may fairly include gas that is identified as most unlikely to go interstate in any event. Any average would in any event be subject to increases under the optional procedure of Section 2.75 of the Commission's Rules for particular packages of gas. The Supreme Court's *Permian* opinion underscores the validity of rates that are just and reasonable for the average or group and accommodate higher-cost incremental gas through special adjustment provisions.

B. *Claimed Need for Area Rate Regulation*

Mountain Fuel Supply Company,[81] argues in effect that the Commission was required to revert to its prior program of area rate regulation, either as a matter of the Commission's jurisdiction under the Natural Gas Act, or as a matter of the requirements of reasonableness, taking into account fundamental differences of cost and market for the sale of natural gas in the Rocky Mountain Area.

In essence, this is an attack on the concept of national rate-making for national gas. We accept and approve the determination of this question in *Shell Oil Co. v. FPC*, 520 F.2d 1061 (5th Cir. 1975), *cert. denied, Cali-*

[80] *See* p. 45, n.25, brief of N.Y. Public Service Commission.

[81] Petitioner in No. 77-1005, which has been consolidated for disposition, Mountain Fuel is a producer of some natural gas but its interest in this proceeding is primarily as a purchaser, as an integrated utility handling natural gas from the producer level to the ultimate consumer.

fornia Co. v. FPC, 426 U.S. 941 (1976). While that approval of national gas rate-making is not fixed in concrete, and is subject to reexamination, petitioner has not made a showing that its immediate maintenance is unreasonable.

The Commission addressed itself to particular problems presented by Mountain Fuel, the instantaneous effect of the national rate increase, the most-favored clauses permitting indefinite escalation raising prices of intrastate gas, and the lack of state commission authority pass along the price increase in higher rates. All these, said the Commission, did not undercut the national rates, but were matters requiring action as to state law and by state commissions. (Opinion 770-A at 168ff., R. 3733 ff.) We approve its reasoning.

VII. Cost Impact of Advance Payments

Under the advance payment program sponsored by the FPC from 1970 through 1975, an interstate pipeline could include in its rate base payments to a producer for gas to be delivered at a future date. Opinion 770 did not analyze the impact of these interest-free loans on the cost of gas, and this failure was criticized in the dissent of Commissioner Smith and in the petitions on rehearing of several consumer groups. In response, the Commission held in Opinion 770-A that a producer who accepted an advance payment after November 5, 1976 (pursuant to a pre-existing contract) would be required to make rate adjustments reflective of the lower cost of capital. In particular, the Commission held that such a producer would be required to charge a rate covering only out-of-pocket costs, i.e. not including a return on investment or accompanying income tax, on all gas covered by the agreement, until the producer had effectively returned to the pipeline through that reduced rate the full amount which the pipeline had collected from

its customers as a result of the inclusion of the advance in the rate base.

On appeal to this court, the Commission's treatment of the advance payments problem is attacked from all sides. The producers' viewpoint is presented by the Louisiana Land & Exploration Co., the SONAT Exploration Co. and a group of small producers. They argue, *inter alia*, that the Commission's action on advance payments was taken without notice and an opportunity for comment, that its resolution is inconsistent with the Commission's prior disposition in its order of December 31, 1975, and that Opinion 770-A is unfairly retroactive insofar as it fails to fulfill producer expectations concerning existing contracts. The Natural Gas Pipeline Co. makes many of the same arguments, but adds the point that the Commission's action may give the producers a basis for refusing to deliver to the interstate market gas previously committed under advance payment agreements. Lastly, two of the consumer petitioners, the Public Utilities Commission of South Dakota and the Congressmen, say that the Commission did not give consumers enough relief: they attack the Commission for its failure to factor into its calculation those interest free advance payments already received by the producers.

Before analyzing these various contentions, we pause to note that this court has been sensitive to the difficult issues of law and policy raised by the Commission's advance payments program. Although we sustained the Commission's commencement of the program on the ground that it was an "experiment in the continuing search for solutions to our national critical shortage of natural gas," we noted our assumption that the data developed from experience under the program would be subjected to meaningful review and reevaluation. *Public Service Commission of New York* v. *FPC*, 467 F.2d 361,

371 (D.C. Cir. 1972). On a subsequent challenge, we found that the Commission had not engaged in adequate reappraisal, that the record as it stood was not sufficient proof that the program was eliciting new supplies of gas to justify extension of the program without such reappraisal, and we remanded for further consideration. Pub. Serv. Comm. of N.Y. v. FPC, 511 F.2d 338 (D.C. Cir. 1975). The Commission made further inquiry and concluded that, on balance, the program had not functioned as had been intended. By order issued December 31, 1975, the Commisison discontinued the program.[52] However, the Commission announced that it would continue rate base treatment for advance payments made pursuant to the executory portions of existing contracts.

We turn first to the producers' attack on the rate adjustments required by the Commission. We are not

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[52] Docket Nos. R-411, RM 74-7, *Order on Remand from Court Opinion Terminating Investigation and Terminating Advance Payment Program with Conditions*, 41 F.R. 2276 (Issued Dec. 31, 1975). The Commission concluded that while some advances had aided the development of offshore reserves, the program did not have the significant impact expected at the inception of the program, and hence as a matter of policy it allowed the offshore portion to expire. The Commission found that onshore advance payments did attract new or additional quantities of gas, but accepted the pipelines' contention that while this was beneficial, the Commission could best assure such development and dedication through rate relief (Mimeo 10-11). On the issue of whether refunds should be required, the Commission agreed with the New York Commission and Louisiana Land and Exploration that the issue required a balancing of the equities, under, e.g., Consumer Federation v. FPC, 169 U.S.App.D.C. 116, 515 F.2d 347 (1975) (which terminated the 180-day emergency sale program), took account of the evidence that the program was in part a success, and concluded that the equities weighed against a refund requirement.

persuaded by their claim that they failed to receive adequate notice of the Commission's intention to take advance payments into account in determining just and reasonable rates. The producers were well aware of the Commission's cost based approach; the dissent of Commissioner Smith in Opinion 770 and the petitions for rehearing of several consumer groups focused attention on the impact of the interest free loans on the cost of capital; and the Commission, in its order granting the petitions for rehearing,[83] explicitly invited oral argument on "the effect of advance payments on the cost of capital." R. 3089. The producers had adequate notice that this issue would be considered.[84]

Nor was the Commission's consideration of this issue precluded by its treatment of contractual obligations in its *Order on Remand* of December 31, 1975. That order did not say that the producers were entitled to both completion of existing contracts and collection of the full interstate rates; it simply permitted the pipelines to continue to include in their rate bases advance payments mandated by existing contracts. This action was neces-

[83] Order Granting Petitions for Rehearing for Purposes of Further Consideration, Granting Interventions and Providing for Oral Argument, issued September 2, 1976, R. 3086.

[84] Similarly, we reject the contention of the small producer group that they were not adequately apprised of the Commission's scope of inquiry. While it is true that they were not made respondents to the proceeding, they were aware that the rate applicable to their sales was directly related to the rate of large producers. To the extent that they are currently relying on the point that the Commission's approach to the executory portions of advance payment agreements will have a greater adverse impact on small producers, they are essentially questioning the adequacy of the adjustment provided in the small producer proceeding. Opinion No. 742, Docket No. R-393, issued August 28, 1975. We do not think that the Commission was required to deal with that point in the context of this national ratemaking.

sary, the Commission explained, because "the pipelines would be required to make advances whether or not this Commission allowed the pipelines rate treatment for such advances," and the pipelines might otherwise be placed in "financial jeopardy." Opinion 742 Mimeo at 18-19. We see nothing in that decision which would prevent the Commission from designing rates reflective of the lower capital costs for producers participating in the program.

Moreover, even assuming that there was a shift in course in Opinion 770-A, towards discouragement of participation in the program, we think there was adequate support for such a shift. The Commission reasoned:

> We recognize that capital generated through the advance payments program should no longer be required to bring badly needed gas supplies to the interstate market. The rate structure set forth in this Opinion is designed to achieve the capital formation objective.

Mimeo at 150, R. 3715. Given the full return on investment included in the new national rates, and the additions to capital from the non-cost based rate for rollover contracts (discussed in section VIII of this opinion), we find substantial evidence supporting the Commission's conclusion that advance payments were no longer needed.

The producers argue that the Commission's rate determination has an unfair retroactive effect on drilling projects already launched on the basis of existing advance payment agreements. However, as the Commission points out throughout Opinions 770 & 770-A, the rates set therein are intended to be high enough to attract additional capital to finance producer expansion. In any event, it should be noted that Opinion 770-A does not prohibit the producers from accepting the payments to which they are entitled under existing contracts. We will not disturb the Commission's implicit judgment that the alleged

hardship to the producer is outweighed by the public's interest in cost-based rates."[81]

We turn to the plea of the Natural Gas Pipeline Co. that the Commission's determination of separate rates for producers receiving advance payments may provide these producers an opportunity to withdraw from existing advance payment agreements and to sell the gas covered by those agreements to intrastate purchasers. If this were in fact the effect of the Commission's rate structure, it would seriously undercut the central objectives of Opinion 770-A. The consequences of the Commission's action will largely depend, however, on the regulatory framework within which existing contracts are renegotiated. The Commission's brief before this court states (at p. 135):

> To the extent that consumers have paid for past advances (by inclusion in the rate base) and pipelines have relied on such agreements to plan future levels of resale and construct new facilities, it would not be in the public interest for the Commission to permit such gas to escape the interstate market as agreed by the contracting parties.

While this is not a Commission opinion, and we do not strictly rely on this representation, it is our view that we can assume, from the Commission's manifested intention in the handling of this thorny issue, that the Commission will continue to exercise its regulatory powers in

[81] Because the Commission's rates are ultimately based on the lower cost of capital for producers receiving advance payments, we reject the contentions that these rates impermissibly discriminate against or penalize those producers. We recognize that the carrying charges are higher than those the producers would have to pay on conventional loans, but the Commission's decision to give to the consumers the rate of return allowed to the producers on their own investments falls within the Commission's range of discretion in much the same way as does its estimate of productivity.

the public interest, and that central to the public interest is the continuation of consumer access to those supplies previously committed to the interstate market. We contemplate that the Commission will guard against any abusive use of the opportunity for renegotiation provided by Opinion 770-A.

For much the same reason we reject the claim of Louisiana Land & Exploration Co. that the Commission's "carrying charge credit" plan is impermissibly vague." This petitioner recognizes that the outlines of the Commission's rate scheme are clear: the producer must charge a reduced rate until a sufficient volume of gas is delivered at the lower rate to offset the amounts previously borrowed from customers of the pipeline. Louisiana's claim is that a producer cannot calculate at the time it accepts an advance what the ultimate cost will be, for the producer cannot know with precision what sums the pipeline will collect from its customers as a result of including the advance in the pipeline's rate base. There is no indication whether many or any producers will now need or want more advance payments within the Commission's framework. Moreover the financial world is not unaware of instances in which in some respects there is uncertainty in permitted return (a commonplace, indeed for investors in utilities) or even in interest obligation (as in the case of indexed or variable debt). If there are differences of approach between producers and pipelines on this matter, it is only one of a number of points on which they must realistically negotiate. To the extent that this poses a real problem for producers, we think that the solution is not a reversal of the Commission's basic mandate in Opinion 770-A, and the principle embodied, but a request to the Commission for clarification and conceivably refinement and adjustment.

We turn now to the contentions of the two consumer petitioners who attack the Commission for its failure to adjust rates to reflect payments advanced prior to the issuance of Opinion 770-A. We begin with the recognition that once a complex regulatory program is implemented, its effects are not easily undone. The producers' objections to the Commission's application of reduced rates to subsequently received payments suggest the even more serious problems of disruption and unfairness which might have been created by retroactive application of these rates to payments already received under the program. We conclude that the Commission's regulatory mission does not require that it fully erase the impact of the program it undertook in the interest of expanded supply.

It is unfortunate that the program was not more successful in expanding reserves for the interstate market. But the program was valid while it was in operation—as an experiment. In the nature of things, some experiments lead to the rejection rather than the confirmation of a prediction. It would be unsound to view this as an occasion for taking the Commission to task for a past mistake. Our present function is only to review the agency's formulation of policy for the future, to insure that the Commission action is an exercise of reasoned discretion within the broad limits set by the statute.

With this definition of our role in mind, we uphold the Commission's treatment of the advance payments program. Opinion 770 did not discuss this issue, apparently because it was not raised by the comments of the parties in the preceding comment period. But once the possible collateral impact of the program had been called to the Commission's attention through the dissent of Commissioner Smith and the comments of the parties on rehearing, the Commission recognized the problem and grappled with it. It devised a formula for the calculation of rates that would discourage further advances

under the executory portions of outstanding contracts and that would, in any event, ensure that no producer obtained a windfall from subsequent receipt of funds under an advance payment contract. The Commission chose not to modify its national rates to reflect funds already advanced pursuant to these contracts but it did so advertently, not casually. Opinion 770-A states:

> Certainly, it would be improper to penalize a producer without any prior notice by reducing its prospective rates because of its prior acceptance of advance payments under a Commission-approved program. Furthermore, these outstanding advance payments have provided additional capital for exploration and development activities, during the period (January 1, 1973-July 27, 1976) when the rates collected were below levels which we herein have determined to be just and reasonable. (Mimeo at 150, R. 3715).

Because the advance payments issue did not appear to be central to the computation of a new national rate, and because of the many other important issues implicated by this rate setting, the Commission's justification of its action in this area is succinct. But the Commission's statement of reasons is "tolerably terse" rather than "intolerably mute." [86] It outlines a rational approach.

First, the Commission points out that "it would be improper to penalize a producer without any prior notice by reducing its prospective rates because of its prior acceptance of advance payments under a Commission-approved program." In the context of opinions 770 and 770-A, we think it plain that this was not a technical procedural objection inhibiting the Commission from taking account of a factor because it was not noticed at the commencement of the proceeding. As we fairly discern

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[86] Greater Boston TV v. FCC, 444 F.2d 841 (D.C. Cir. 1970), cert. denied, 403 U.S. 923 (1971); WAIT Radio v. FCC, 459 F.2d 1203 (D.C.Cir.), cert. denied, 409 U.S. 1027 (1972).

its path, the Commission was here referring to a more substantial equitable consideration: the producers who accepted the advances were not told at the time the program was approved, and the contracts were negotiated, that the benefits given to them as an inducement would later be the subject of compensating reductions of rates. Indeed, had such a penalty or burden been announced at the start, it would obviously have cut across the Commission's purpose to induce otherwise unavailable activity, to encourage more investment and dedication to the interstate market. The Commission's undoubted latitude to make policy judgments, which the court may not question unless they are arbitrary, includes a broad discretion to make equitable judgments, and to conclude that it would be unfair to reduce the rates of those producers who had accepted the advance payments with very different expectations. The Commission is not a court of equity, but it has authority to take equitable considerations into account in forming policy.[87] In a matter such as this equitable considerations undergird reasonableness and the Commission's ongoing credibility. An agency which must consider incentives, as part of overall just and reasonable rates, may reasonably seek to avoid an unanticipated burden on those members of the industry that had participated in a Commission-sponsored program.

The Commission's *Order on Remand*, issued December 31, 1975 (supra note 82), indicates that there were substantial numbers of cases in which the interest-free loans were needed to undertake additional activities and where they were used for that purpose.

An argument might be made that the full benefit of the new national rate should not be allowed to those producers for whom the advance payments were really premiums, and not an inducement to expanded invest-

[87] *See, e.g.*, Niagara Mohawk Power Co. v. FPC, 126 U.S. App.D.C. 376, 379 F.2d 153 (1967).

ment. Any rate scheme based on distinctions between these two types of situations would have inevitably been drawn into time-consuming and necessarily speculative judgments about the capacities and motivations of the producers participating in the program. The Commission's avoidance of such complexities is a choice that deserves deference. "An agency confronted with a complex task may rationally turn to simplicity in ground rules, and administrative convenience, at least where no fundamental injustice is wrought." Gulf Oil Corp. v. Hickel, 140 U.S.App.D.C. 368, 374, 435 F.2d 440, 446 (1970).

Opinion 770-A identifies why we cannot say that a "fundamental injustice" is created by the Commission's decision to retain its uniform national rate despite some variation in costs due to the advance payments program. The Commission points out that from January 1, 1973, to July 27, 1976, (the date of issuance of Opinion 770), the producers were selling gas at rates lower than those judged to be just and reasonable in the context of this proceeding. In linking this deficiency in revenues with the availability of interest-free loans from the advance payments program, the Commission perceived a kind of rough justice between consumers and producers. We cannot say this was perverse or arbitrary.

Moreover, there is an even broader justice in the Commission's approach to the whole advance payments issue. The Commission may not have recaptured for the consumer the full value of sums already advanced, but it forces the producers who take subsequent advances to make payment at a rate higher than was expected at the time of the contract. In this way it protects the producers' reliance interest in previously received payments, but gives both producers and pipelines an interest in renegotiating the executory portions of contracts that have in general worked out contrary to the public interest.

The advance payments program was an experiment that was unsuccessful on balance. It provided some producers with a "premium" price for their gas. But the Commission's brief analysis is sufficient to preclude any judicial requirement that forces the Commission to recoup that premium through lower national rates. The wreckage of the program lies across the natural gas industry like the debris of an airplane crash. Because of its scattered uneven impact, a uniformly lower national rate would be unfair to some producers, and a system of rates which took into account varying degrees of participation would be extraordinarily difficult to design and administer. Rather than incorporate into its new national rate all of the complications arising from its discontinued experiment, the Commission chose to make a "clean start"—to disregard those payments advanced prior to the new rates, but to adjust strictly for any payments made in the future. As we have already noted, the context was one of past inadequacies of revenues. The common law of public utility regulation pragmatically accepts the futility of embroiling current and future rate regulation with a function of making correctives for excess or insufficiencies of rates charged in the past.[88] Similarly in the present context, we think the Commission's course was a reasonable exercise of its latitude, which gives regulatory agencies an authority for "pragmatic adjustment." FPC v. Natural Gas Pipeline Co., 315 U.S. 575, 586 (1942).

VIII. Continuation of the Opinion 699 Rate for "Rollover" Gas

We turn next to the Commission's treatment of the oldest (pre-1973) vintages of flowing gas. Prior to Opin-

[88] Board of Public Utility Commissioners v. New York Telephone Co., 271 U.S. 23, 31-32 (1926).

ion 770, prices for that gas were specified by two Commission Opinions. Opinion 749, issued December 31, 1975, announced a rate of 29 cents for gas from wells commenced prior to January 1, 1973. Opinion 699, though issued earlier, is best understood as establishing an exception to the general rate, an exception for gas sold pursuant to a certificate of unlimited duration and under a renewal contract executed after January 1, 1973. This gas, known as "rollover gas" from its renewal characteristic, was priced at the then (1974) national rate of 52 cents per Mcf, with a one cent per year escalator. Opinion 699 made this rollover rate available only if the renewal contract replaced a contract that had expired by its own terms. This rate and its eligibility requirements were sustained on review in the 5th Circuit's Opinion in *Shell*, 520 F.2d at 1076-77.

In Opinion 770, the Commission decided to maintain the same basic rate for gas sold under renewal contracts, i.e. the 52 cent base rate with the one cent per year escalator. Thus, as of January 1, 1977, the rate for gas sold under a replacement contract would be 53 cents. This price, the Commission explained, would avoid a large increase in the rate for "flowing gas" while insuring "additional revenues . . . for expanded exploration and development programs which are necessary to discover and produce new supplies of natural gas." Opinion 770 at 16, R. 2511. On reconsideration in Opinion 770-A, the Commission adhered to the 52 cent base rate for rollover gas.

The producers object because Opinion 770, while maintaining the basic 52 cent rate for rollover gas set in Opinion 699, did not follow Opinion 699 in the methodology of setting the same rate for rollover gas as for new wells. Under Opinions 770 and 770-A, the rate for renewal gas is considerably below that for new gas, of either the 1973-74 or 75-76 biennia. But as we pointed out earlier in this opinion, the Commission was well

within its discretion in returning to vintaging, as a means of preventing windfall profits to producers from the greatly increased rate and of mitigating the impact of that rate on consumers. This kind of protection is especially appropriate as to renewal gas, the gas that is oldest and associated with lowest costs.

The consumers argue that the Commission acted unlawfully in allowing a price for renewal gas above that held to be cost-justified in Opinion 749. They urge, in effect, a strict form of vintaging, in which the price of the oldest vintage is based on its lower cost.

The Commission recognizes that the 52 cent rate cannot be defended on the basis of cost, but argues that this price is justified as an adjustment to assure equity in its overall rate design. Huge sums of money—the Commission estimates $3.5 billion per year—will be needed to finance exploration and development of new sources of gas over the next decade. The very high rates for gas from wells commenced in the most recent biennia will help provide this capital, but, in the Commission's view, "it is only fair that consumers of "flowing gas" share the burden of financing the added exploration." Opinion 770-A at 19, R. 3584.

This rationale for pricing renewal gas was sustained—at least tentatively—by the Fifth Circuit in *Shell*, although that was in a context of abandonment of vintaging. In any event, we approve it for Opinion 770. In general vintaging is a method of pricing gas on the basis of cost at the time of production. However, the agency is not bound strictly to cost. The Commission "must be free . . . to devise methods of regulation capable of equitably reconciling diverse and conflicting interests." *Mobil*, 417 U.S. at 331, quoting *Permian*, 390 U.S. at 767. The access of some consumers to older, low-cost gas is largely an historical accident. The Commission is entitled to place on these consumers a portion of the burden of

new capital formation, so as to achieve an equitable balance between different consumer groups. *See Mobil*, 417 U.S. at 320. Here the Commission's allocation of that burden cannot be attacked as unfair. By reintroducing vintaging the Commission has avoided the jarring impact of a rate increase. By continuing the rate established by Opinion 699, the Commission also insures equity as between rollover contracts, without inserting a discrimination according to the date of termination of the prior contract.

New York does not challenge the general principle that consumers of old gas should bear a part of the burden of replacing the commodity they are presently exhausting, but does take issue with the application of that principle in the circumstances of this case. New York and some of the other consumer petitioners raise two principal objections:[89] first, that in view of other available sources of capital, the need to raise capital from consumers of old gas is not as pressing as the Commission believes; and second, that consumers who contribute capital for expansion of the natural gas reserves should receive some guarantee that the funds

[89] New York makes an additional argument: that the initial judicial decision approving a higher rate for rollover contracts, *Shell Oil Co. v. FPC*, 491 F.2d 82, 89 (5th Cir. 1974), rested in part on the need to eliminate vintaging, and in particular on the disincentive effects of low rates for new wells on fields already dedicated to interstate commerce. New York points out that Opinion 699, by allowing vintaging according to well commencement date rather than field dedication date, removed this disincentive.

We note, however, that the Fifth Circuit did not rely on the disincentive argument when it affirmed the 52 cent rate in *Shell*, 520 F.2d at 1077, and the Commission does not press this argument now. The Commission makes the point that the higher rates for replacement contracts may encourage reworking of older wells, Opinion 770-A at 25, R. 3590 but it is not central, either in the Commission's opinion or ours.

will be used for that purpose, and not for other profitable enterprises.

In support of its first objection, New York asserts that the 29 cent rate for flowing gas established by Opinion 749 contained a generous component for future exploration and development costs which makes unnecessary the full increase granted by the Commission for renewal gas. New York points out that the cost of flowing gas in Opinion 749 was based upon 1972 levels of exploration and development expenditures. Since these cost levels were undoubtedly far higher than those in the years when the bulk of the gas was actually discovered, New York submits that the 29 cent rate for flowing gas itself includes a substantial noncost component which can be used to finance new exploration.

New York further asserts that the Commission did not really adopt this rate as a result of reasoned reflection, beginning with an estimate of the total capital required, and then structuring a rate profile that allocated burden as between flowing gas and new gas. New York submits that the rate structure adopted by the Commisison is the result of chance rather than integrated design, and provides an aggregate amount of capital from flowing gas prices, together with that attraced by the 15% rate of return for new gas, well in excess of the producers' needs.

New York's argument has considerable force. The Commission does not explain why it feels that the 29 cent rate for flowing gas will not contribute to capital formation. The gap is the more conspicious in that it is identified in Commissioner Smith's dissenting view. (R. 3825). Opinion 770 would be more persuasive if it contained a more complete or explicit analysis of anticipated sources of capital and their interaction.

Yet in the context before us, we do not require a remand. The Commission is limited at this time to pro-

jections about the effects of its rates and about the producers' needs. Further consideration will still leave the matter in prediction, not proof. The public interest requires exploration and development; rate regulation may properly take into account the need to provide capital funds, as *Permian* and *Mobil* establish; there is no assurance at present of defining the exact rate of capital accumulation and allocation of burden that will further the public interest. Experience, however, will permit the Commission and the nation to ascertain whether under the rates set in Opinion 770-A producers would accumulate more capital than they can efficiently reinvest. It is the hallmark of the administrative process that it can proceed with flexibility and re-examination. Public Serv. Comm'n of N.Y. v. FPC, 151 U.S.App. D.C. 307, 407 F.2d 361 (1972); 167 U.S.App.D.C. 100, 511 F.2d 338 (1975) (advance payments). On some issues "a month of experience is worth a year of hearings." American Airlines v. CAB, 123 U.S.App.D.C. 310, 319, 359 F.2d 624, 633 (en banc, 1966), *cert. denied*, 385 U.S. 843 (1966).

The need of the courts to hearken to "pragmatic adjustments" [90] by a regulatory agency betokens a principled pragmatism in the courts. These are extraordinary times in matters of energy, and the courts can serve their function of review by insisting that the agencies given primary responsibility steadfastly re-examine their assumptions. Our affirmance, then, is on the condition that the Commission monitor closely both the producers' needs and the capital being raised from internal and external sources. It is our premise that the Commission would determine the contributions to capital of the oldest flowing gas, rollover gas, and the newer vintages. With

[90] FPC v. Natural Gas Pipeline, 315 U.S. 575, 586 (1942), Mobil Oil v. FPC, 417 U.S. 283, 329 (1974).

this prospect of continuing inquiry in the light of experience, we discharge our obligation to further the interest of justice, 28 U.S.C. § 2106, without insistence on a more extended and plenary analysis of predictions.

We have, however, pondered the second challenge pressed by the consumer petitioners against continuation of the Opinion 699 rate for rollover gas, that the rates presently put into effect by the Commission are unaccompanied by any condition or other action to assure that the funds raised through these rates are used to add supplies to the interstate market. The consumer petitioners point out that the 52 cent base rate for rollover gas was only provisionally approved by the Fifth Circuit in *Shell*, 520 F.2d at 1077. At that time the Commission had claimed that the pipelines would be able to bargain for an expansion of interstate supply by refusing to sign replacement contracts (and thereby holding the producers to the old rates or the prospect of abandonment proceedings). The consumers had strenuously disagreed, arguing that "in this time of an ever-increasing shortfall of supply the pipelines will simply not be in the position to bargain for or gain any *quid pro quo*." 520 F.2d at 1077. On review, the court noted that

> the Commission does not consider the matter finally determined. It has expressly reserved for consideration the question of whether the pipelines are neogtiating in good faith or trying to take advantage of the producer's locked-in position, and whether or not the additional funds generated by the application of the new rate increase "the level of monies committed to exploration and development programs and the volumes of new gas supplies dedicated to interstate pipelines under long-term contracts." Opinion 699-H, Appendix pp. 564-65 and n. 121.

Shell at 1077. The consumers argue that the Commission has not made such an analysis in the context of

this biennial ratemaking and that the court should therefore require the Commission to discontinue the 52 cent rate or at least impose some condition on that rate, designed to guarantee that the funds generated will be used to expand interstate supplies. The consumers were pressed by the court at oral argument for the specifics of such a requirement, but did not adduce a satisfactory answer. They insist that with some thought the Commission could develop a workable "connecting rod" between profits from rollover gas and new investment.

The Commission makes three basic points in response. First, it points out that between 1974 and 1975, reserve additions and footage drilled increased by approximately 8%. "In view of the inadequacy of the national rate established in Opinion 699-H", says the Commission, "the 'rollover' treatment therein undoubtedly provided part of the necessary capital for such drilling activities." Opinion 770-A at 23, R. 3584. Second, the Commission asserts that it is now undertaking to measure more precisely the effect of the "rollover" prices, by gathering from the producers on its Form 64 the amounts the producers have spent on exploration and development. Third, Commission counsel put it during oral argument that a good and sufficient "connecting rod" between the funds to be generated by the renewal contract rate and investment for expansion of interstate reserves is price—that the higher prices available under Opinion 770-A for new gas will induce the producers to invest internally generated capital in further exploration and development.

We cannot put the matter wholly at rest. The Commission's general observations concerning additions to reserves are not more informative, perhaps less, than the general statistics unsuccessfully offered as a full defense of the advance payments program in *Public Service Comm'n of New York* v. *F.P.C.*, 167 U.S.App.D.C. 100,

109, 511 F.2d 338, 347 (D.C. Cir. 1975). The present state of affairs is best reflected in the Commission's admission that "we cannot precisely quantify [the] effect [of the rollover treatment] herein." Opinion 770-A at 23, R. 3584. The Commission has not analyzed the replacement contracts filed by the pipelines, to evaluate whether they have been able to negotiate expanded supplies in exchange for the higher rate, and whether the funds generated by the rollover treatment are actually being reinvested in exploration for the interstate market.

As for the Commission's contention that the higher prices allowed for interstate gas will induce the investment of rollover capital in interstate gas operations, this too is conjectural. Experience may indicate this for offshore gas in the Federal domain, which must go interstate if produced at all, without establishing attraction for other gas so long as it has the option to go to unregulated markets at higher prices. Consumer petitioners reiterate that at least one prominent oil company has seen fit to invest its funds in Montgomery Ward. Producers may seek other investments in quest of higher return, diversification of risk, or other objectives. Moreover, the assumption of a price of gas under Opinion 770-A high enough to attract the producers' internally generated funds would also, with some logic, support the conclusion that other private funds will be attracted. It may be that such logic will be undercut by experience, but if experience confirms logic it would obviate the basis for taxing the consumers of old gas for this capital.

We do not press any further with this kind of dissection of the Commission's reasoning. Obviously, the Commission cannot present at this time a full empirical analysis of the efficacy of its rollover treatment. We note, however, that this proceeding began less than two months after the Fifth Circuit's Opinion in *Shell*, and that Opinion 770 was issued less than nine months after

Shell came down. The Commission could certainly have moved more vigorously to appraise the effects of the rollover rates. We cannot say, however, that its response has been so sluggish or dilatory as to mandate a termination of the program. The Commission is now attempting to gather information concerning the producers' exploration and development expenditures through its Form 64 and, if necessary, by other means. We therefore conclude that the appropriate disposition of this issue is to affirm the 52 cent base rate for renewal contracts, with the condition that the Commission expeditiously undertake to measure the success of this program. Ultimately the data the Commission has gathered will be required to meet the standard laid down in *Public Serv. Comm'n of New York* v. *F.P.C.*, 167 U.S.App.D.C. 100, 110, 511 F.2d 338, 348 (1975) [*advance payments*]:

> Justification of the program depends on the attraction of new or additional quantities of gas supply to the interstate market, or at least on the advancement of the date at which some gas reserves become available to that interstate market.

This type of review, together with the analysis of other sources of capital contemplated earlier in this section of the opinion, should insure that the rates on rollover gas will be continued only as it is discerned that the funds generated are both needed and used to finance the development of new supplies for the interstate market. On these premises, we affirm the 52 cent base rate for contracts replacing prior contracts which have expired of their own terms.[21]

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[21] Austral Oil Co. and Aztec Oil & Gas Co. attack the Commission's Opinions 770 & 770-A for their failure to extend the 52 cent rate to contracts replacing prior contracts of indefinite term. They argue that from an economic standpoint the renegotiation of a contract of indefinite term which has been in effect for 20 years or more is indistinguishable

IX. Application of Biennium Rates

The producers raise questions concerning the fairness and procedure of the FPC's determination in Opinion No. 770-A which limits the price for "new" gas to sales from wells commenced on or after January 1, 1975. The prime argument is that the Commission should have permitted the rate for "new" gas to apply to all gas first contracted or "dedicated" to the interstate market on or after January 1, 1975.

The criterion of the cut-off date for "new" gas has been much pondered by the FPC. The contract-date test was used in Permian I [92] and Southern Louisiana I.[93] It was there provided in recognition of the incentive character of the "new" gas rate.

Producers especially rely on the actions in the first national rate proceeding. The original notice proposed that the cut-off date be based solely on well commencement date. In Opinion No. 699,[94] the FPC used a later

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from the replacement of a contract which has expired of its own terms.

While there may be some merit to this view, we do not think that the Commission's resolution of this issue is an unlawful one. The Commission recognized that "Pipelines and producers which entered into unlimited contracts did so for the mutual advantage: The former to secure a constant source of supply and the latter to secure a market." Opinion 770-A at 28, R. 3593. The Commission could reasonably have decided to give the pipeline the full benefit of its bargain. We will not disturb this kind of equitable judgment.

[92] Opinion No. 468, Permian Basin Area Rate Proceeding, 34 FPC 159, 187 (1965).

[93] Opinion No. 546, Southern Louisiana Area Rate Proceeding, 40 FPC 530 (1968).

[94] 51 FPC 2212, 2215.

cut-off date—the date of the initial delivery into interstate commerce. In Opinion 699-H, the FPC rejected the petitions for reconsideration as filed by New York and APGA, and went further to provide that new gas rates would apply where after January 1, 1973 there was discovery of a new reservoir even though prior to 1973 there was a contract dedication to interstate commerce of the acreage. 52 F.P.C. 1604, 1634. Finally, the definition of "new" gas was extended, by a March 31, 1975 order clarifying Opinion 699-H, to apply to "recompletion" into a new reservoir in an existing well where the drilling into the different reservoir was commenced on or after January 1, 1973.

All this prior history, and expansion of definition of availability of "new" gas provision was, say the producers (Br. 30), upheld by the Fifth Circuit in *Shell*.

They argue that the Fifth Circuit, "sustained Opinion No. 699-H, and specifically upheld the Commission's new gas definition against attack." The contention is not decisive, but we feel bound to note that this is a misreading of *Shell*. In that case, the court upheld the application of the "new" rate to renewal contracts, a problem already discussed (supra, Section VIII). As to the points now under discussion, however, the court specifically noted that the propriety of applying the "new" rate to new commitments of gas from wells already commenced "is not questioned in this proceeding." 520 F.2d at 1070.

Turning to the merits of what FPC did in 1976, Opinion No. 770-A considers the contention of APGA on application for rehearing that the new rates should apply only to new wells commenced, and not to new dedications of gas previously sold in the intrastate market. The FPC agreed as to this aspect of the APGA position, saying the new $1.42 rate for such sales "would probably tend to serve only as a floor price for the intrastate market, rather than attracting gas previously sold in the

intrastate market to the interstate market." (R. 3579). The FPC found no evidence since the issuance of Opinion No. 699-H that the national rates for this class resulted in any significant new dedication to the interstate market. There was substantial evidence, as indicated in the reports of the AGA for the years since the issuance of Opinion No. 699-H, that the vast majority of new reserve additions was committed to the intrastate market. The interstate market obtained only 25% of the new reserve additions for 1974, and only 13% of the additions for 1975. (R. 3681).

Finally, the FPC pointed out the consumers' position that "it would be fundamentally inconsistent with cost-based pricing to permit lower cost gas to receive higher cost-based prices." (R. 3579). Thus, on this point Opinion No. 699-H and the *Shell* opinion became inapplicable, pro tanto, when the Commission went back to vintaging, a premise already approved in Part III of this opinion.

As to fairness, the producers say they were not given notice of consideration of change in eligibility for new rates. But as already indicated, the original notice said the FPC was not proposing revisions to 699-H itself but was relying on responses. In its *initial* comment, APGA recommended that no flowing gas should be entitled to a new rate. This embraced the possibility of denying the new national rate to gas already flowing to the intrastate market which, because of subsequent contracts, was later dedicated to the interstate market. This point was pressed in the application for rehearing.

The producers now deprecate the vitality of a contention urged on rehearing. It clearly appears from the Commission's actions in regard to the first national rate docket that the original order in Opinion 699 was more favorable to producers than the notice, and the orders on reconsideration (699-H) and clarification (March 1975) were more favorable to the producers than the

original order. In this context, we cannot seriously accept the Producers' contention that the procedure previously invoked to their advantage became inherently unfair when now invoked to the advantage, to some degree, of consumers.

The underlying reality runs along these lines: The issue of cut-off criterion had long been in a state of flux. The order eventually issued by the FPC was consistent with its reversion to a vintaging and cost-based policy. The cut-off criterion plainly interrelates to the underlying philosophy of cost-based rates. The FPC gave consideration to incentive in the selection of the higher range of level of costs and rate of return rather than an increment above costs. The FPC was concerned with balancing of interests to guard against higher rates being allowed without cost basis. And there was an absence of substantial demonstrable benefit in supply terms that compelled the FPC to act otherwise.

We affirm the FPC's determination as supported by substantial evidence and exercise of reasonable discretion.

APGA and Congressmen urge that the "new" rate should only apply to wells commenced after the date of issuance of Opinion No. 770. We think the Commission acted within its discretion in applying the "new" rate to all wells commenced within the biennium that was the subject-matter of its proceeding. Producers who commenced wells within the biennium but before the FPC issued its order were entitled to rely on the fairness of the rate order that would in due course be issued for the proceeding. That was the Commission's announced intention.[95]

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[95] Congressmen argue that all gas drawn from a reservoir should be priced according to the well commencement date for the exploratory drilling into that reservoir, rather than the well commencement dates for after-drilled developmental wells necessary to produce the gas while managing under-

X. Conclusion

We end the opinion where we began. The standard of judicial review substantially determines, in cases like this, the outcome of the court. The general deference of the courts to the technical competence of administrative agencies is subject to restraint in the requirement—imposed by law and enforced by the courts—of reasoned decisionmaking and fair procedure. This doctrine does, however, provide wide latitude for a regulatory agency engaged in rate or price regulation to undertake "pragmatic adjustments." [96] And at a time of national supply emergency and intrastate freedom from regulation that puts severe constraints on efforts to increase interstate supply, there is even greater latitude for the administrative agency.

The *Mobil* opinion instructs us to abstain from judicial intervention as long as the agency has not "failed to seek answers" to the crucial questions, and has given reasons for the answers it chose. The Commission was faced with most troubling problems, and it addressed itself to those problems in a reflective way, probing for

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ground pressure. The gravamen of this argument appears to be that reserves are added when initially located, rather than when their extent is mapped out by developmental drilling. Further, in a time of rising rates, costing by date of developmental well drilling might lead to delays in such drilling to take advantage of higher rates. To limit the biennial gas rates as Congressmen seek could involve the Commission in endless squabbles over which wells were experimental, which developmental. Since developmental wells would be limited to the price applying to the spud date of the associated exploratory well, producers might not undertake production of reservoirs or fields in which a long lag time was foreseen between commencement of the exploratory well and completion of all necessary developmental drilling.

[96] FPC v. Natural Gas Pipeline, 315 U.S. 575, 586 (1942); Mobil Oil v. FPC, 417 U.S. 283, 329 (1974).

possible solutions. The consumer interests complain that the Commission has systematically steered its answers in favor of higher rates and was unduly influenced by the wisp of hope that these would solve supply problems. The producers complain that the Commission's approach is less favorable to them, and to realistic assurance of interstate supply, than prior opinions. We think that the Commission has presented reasoned responses to both sets of objections, in view of the evidence available.

In sustaining the Opinion 770-A we have relied in very considerable measure on the premise that this agency is charged with responsibility, and will duly exercise that responsibility, for re-examination of its assumptions and projections in the light of experience. That is the course the court followed in regard to the advance payments program.[97] To swallow doubts on the premise of re-examination is not a course to be indulged lightly, since it harbors the prospect of irreversible harm during the testing period. But risk cannot be avoided in a situation such as we have before us.

Overall we conclude that this is an approach that carries out our judicial obligation to render judgment in the interest of justice, *see* 28 U.S.C. 2106. It is a peculiarly appropriate approach at a time like the present when the Nation is engaged in a searching review of its entire energy policy and a possible restructuring of agency powers. We contemplate that the cognizant agency will conduct its re-examination with devotion to the public interest, and that its actions will be reviewed by the courts with dedication to fairness and the Rule of Administrative Law.

Affirmed.

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[97] Public Serv. Comm'n v. FPC, 51 U.S.App.D.C. 307, 467 F.2d 361 (1972); Public Serv. Comm'n v. FPC, 167 U.S.App. D.C. 100, 511 F.2d 338 (1975).

FAHY, *Senior Circuit Judge*: This opinion sets forth the court's positions on the procedures followed by the Commission and on the alleged disqualification of the Commission to render Opinion No. 770-A.

THE PROCEDURES FOLLOWED BY THE COMMISSION WERE LAWFUL

In initiating these proceedings the Commission gave notice on December 4, 1974, pursuant to the Administrative Procedure Act [98] and Sections 4, 5, 7, 8, 10, 14, 15 and 16 of the Natural Gas Act,[99] that it was to prescribe "rules and regulations" establishing on a nationwide basis just and reasonable rates for jurisdictional sales of natural gas by producers.

The Commission thus invoked, and followed throughout, rulemaking procedures which, to borrow language in *United States* v. *Allegheny-Ludlum Steel Corp.*, 406 U.S. 742, 758 (1972), afforded to interested parties "an opportunity to participate * * * through appropriate submissions," but without opportunity to cross-examine or examine under oath others who made submissions in the form of comments, recommendations, or otherwise.

Cost studies and rate recommendations prepared by the Commission's staff were made available to the parties, with opportunity to file comments thereon, leading to a clarification by the Commission of the previous studies and recommendations. Opportunity was then afforded the parties to reply to the clarification. Additional studies and recommendations were made within the Commission's organization, with similar opportunity to comment and reply. As the Commission points out:

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[98] 5 U.S.C. §§ 551 *et seq.*

[99] 15 U.S.C. §§ 717c, 717d, 717f, 717g, 717i, 717m, 717n, 717o.

> Some forty-six parties and groups of parties representing every segment of the natural gas industry and the consuming public filed initial and/or reply comments of the various staff rate recommendations, the intrastate market and natural gas rate regulation in general, and additionally filed comments, answers and replies to the submittals of each other.

Br. p. 11.

Opinion No. 770 was issued July 27, 1976, followed November 5, 1976, after rehearing and oral arguments, by Opinion 770-A.

Apart from dispute as to their justness and reasonableness the rates are challenged as procedurally invalid because determined without the kind of full dress hearing said to have been required by the Administrative Procedure Act (APA), the Natural Gas Act and due process of law. As to the APA, first considered, the answer turns on whether the hearing required by Sections 556 and 557 or the procedures of Section 553 or an admixture of those provisions applied.

In *Mobil Oil Corp.* v. *F.P.C.*, 483 F.2d 1235, 1249 (1973), our court said that when Sections 556 and 557 of the APA govern, "parties have the right to submit evidence and engage in some form of cross-examination", but that when Section 553 governs, a method of proceeding somewhat more informal than was utilized in this case is generally permitted. The court noted, however, that Sections 556 and 557 govern only "when rules are required by statute to be made on the record after opportunity for an agency hearing." The Natural Gas Act contains no express mandate of that character. Nevertheless, this does not solve the problem whether the procedures of Section 553 have been complied with, or whether the Natural Gas Act, notwithstanding it contains no reference to an "on the record" hearing, requires more formal procedures in establishing rates by rulemaking than

were accorded the parties in the present proceedings. This depends upon the meaning of Section 553 of the APA and the "full hearing" specified in section 4(e) of the Natural Gas Act, considered with the substantial evidence provision of Section 19(b) of that Act.[100]

In arriving at our conclusion, we consider now *United States* v. *Allegheny-Ludlum Steel Corp., supra,* which arose under the Interstate Commerce Act. The I.C.C. had entered an order that unloaded freight cars must be returned in the direction of the owning railroad. The Commission proceedings were an exercise of its legislative rulemaking authority, challenged as inadequate. The substantive Act contained no requirement that a Commission determination should be "on the record" after an opportunity for an agency hearing. Sections 556 and 557 of the APA accordingly were held not to govern the proceedings; the governing Section of the APA was § 553, allowing the more informal procedures, that is, a non adjudicatory type of hearing on written submissions.

Soon after, in *United States* v. *Florida East Coast Rwy. Co.*, 410 U.S. 224 (1973), the Court again upheld the use by the I.C.C. of the informal procedures of Section 553, this time in fixing "incentive per diem rates", which is somewhat closer to the situation before us now. The Court referred to its earlier decision of *F.P.C.* v. *Texaco*, 377 U.S. 33 (1964), as supporting a broad definition of

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[100] 15 U.S.C. §§ 717c(e) and 717r(b). We think that what the Court said about the impact of an amendment to the Interstate Commerce Act in *United States* v. *Florida East Coast Rwy. Co.*, 410 U.S. 224 (1973), could be said with equal application to the "substantial evidence" standard enunciated in the judicial review provision of the Natural Gas Act, 15 U.S.C. § 717r(b): "Congress . . . specified necessary components of the ultimate decision, but it did not specify the method by which the Commission should acquire information about those components." 410 U.S. at 235. See discussion in text at p. 9, *infra*.

"hearing". Moreover, the Court also commented that where a statute called for proceedings "on the record after opportunity for an agency hearing" thereby invoking §§ 556 and 557 of the APA, the statute was satisfied in some instances by evidentiary submission in written form "if a party will not be injured thereby". 5 U.S.C. § 556(d). 410 U.S. at 241.

Having in mind the *Allegheny-Ludlum* and *Florida East Coast Rwy.* cases, and the outline of how a massive amount of material was accumulated for consideration by the Commission in these proceedings, we turn again to our decision in *Mobil Oil, supra.* The order of the Commission there reviewed had set minimum rates of pipelines for transporting certain liquid and liquifiable hydrocarbons. The order was challenged on jurisdictional and procedural grounds. As to the latter ground, the court exhaustively reviewed the relevant provisions of the APA, particularly the interrelationship of Sections 556 and 557 with Section 553, and declined to hold that either the statute or the Constitution requires the Commission in ratemaking by rulemaking to observe the provisions of Sections 556 and 557. Turning then to the Natural Gas Act, and noting that a factual determination by the Commission must be supported by "substantial evidence", 15 U.S.C. § 717r(b), the *Mobil* court observed that facts were to be determined and reviewed under that Act with a greater degree of certainty than is possible under the informal procedures of Section 553, adding that informal comments could not create a record that satisfies the substantial evidence test. *Florida East Coast Rwy., supra,* was thought not to the contrary, because the Commerce Act contained no substantial evidence requirement to support an I.C.C. determination. Nevertheless, in the end the *Mobil* court remanded the case for other reasons, concluding that if it were to agree with the decision of the Tenth Circuit in *Phillips Petroleum* v. *F.P.C.*, 475 F. 2d 842 (1973), upholding the authority of the Federal

Power Commission to fix area rates for natural gas sales in interstate commerce by informal rulemaking,

> the lack of fair notice and an adequate record on which the prices were set here would still require us to remand this case.

483 F.2d at 1263-64. The notice basis for the *Mobil* decision was accepted by our court in *American Public Gas Association* v. *F.P.C.*, 498 F.2d 718 (1974), a decision otherwise in conflict with the hearing discussion in *Mobil*. We held in *American Public Gas Association* that the Commission had appropriately resorted to rulemaking in determining initial rates for independent-producer areas under Section 7 of the Natural Gas Act and that in doing so the requirements of due process were also satisfied. Pointing out that the relevant sections of the Act contained no "on the record" provision for rulemaking, 5 U.S.C. § 553(c), the court held that those sections on their face "do not require the Commission to follow the formal procedures of Sections 556 and 557" of the APA. The Commission, we held, "is not forced to adopt the procedures of a trial, with formal hearings, oral testimony under oath, cross-examination and the like. Evidentiary submission in written form may be sufficient", citing in support *United States* v. *Florida East Coast Rwy. Co.*, *supra*, *F.P.C.* v. *Texaco*, *supra*, and our *Mobil* case, *supra*. We said further:

> The procedure chosen by the Commission must of course give the parties fair notice of exactly what the Commission proposes to do, together with an opportunity to comment, to object, and to make written submissions; and the final order of the Commission must be based upon substantial evidence. *See* United States v. Florida East Coast Rwy Co., *supra*, 410 U.S. 224, 241, 93 S.Ct. 810, 35 L.Ed.2d 223 (1973). We think the Commission's procedures here meet this test.

498 F.2d at 722. In this connection *see, also, Public Service Commission of the State of New York* v. *F.P.C.*, 467 F.2d 361, 366 (1972).

Not long after came *Shell Oil Co.* v. *F.P.C.*, 520 F.2d 1061 (5th Cir. 1975), certiorari denied *sub nom., California Co.* v. *F.P.C.*, —— U.S. —— (1976).

There for the the first time the Commission had established national rates for natural gas sold in interstate commerce, and there too, as in the proposed area rate proceeding before the *Phillips* court, the Commission had generally followed the informal rulemaking procedure. Upholding the Commission the court stated:

> Were the Commission to have allowed all interested parties to submit oral testimony and conduct oral cross-examination on an undertaking so massive and novel as setting a national rate for new gas, the proceeding would have taken years, and the Commission's power to effectively regulate the industry would have been destroyed.

520 F.2d at 1076. Our court had not been confronted with such a situation in *Mobil*.

While disclaiming any intent to delineate the minimal procedures required by the Natural Gas Act and the APA, the Fifth Circuit noted in *Shell* that the Commission, "went beyond the rudiments of informal rulemaking [under § 553]." 520 F.2d at 1074. Here, as there, the parties "submitted reply comments, this second round of submittals giving them an opportunity to rebut both Commission and privately-generated evidence." *Id.*

We note also that a three-judge court in the District of Delaware has held:

> Under Section 553(a) of the APA, the Commission is required only to "give interested persons an opportunity to participate in the rulemaking through submission of written data, views or arguments with or without opportunity for oral presentation."

> Clearly, under Section 553(a), the Commission possesses the discretion whether to permit oral presentation and reply submissions and, if so, to determine their scope, character and time sequence.

Chemical Leaman Tank Lines, Inc. v. *United States*, 368 F.Supp. 925, 946 (1973).

The procedures employed in the case before us went a step beyond the minimum required by Section 553 and satisfy also the hearing requirement of the Natural Gas Act. The Fifth Circuit's appraisal of the situation in *Shell* is applicable and we agree with it. Accordingly we shall not disturb Opinion No. 770-A on procedural grounds. In so concluding we resolve the due process question. Either implicitly, or explicitly as in *Phillips* and *American Public Gas Association*, the courts have without exception found no violation of due process when the orders involved in the several situations adverted to have resulted from procedures of rulemaking by the I.C.C. and the Power Commission which were consistent with the particular statute governing each agency and with the Administrative Procedure Act.

We have not overlooked the contention that the provision of the Natural Gas Act requiring substantial evidence to support an essential element of the Commission's order, *Permian*, 390 U.S. at 792, calls for a trial-type hearing. Section 15(b) of the Natural Gas Act, 15 U.S.C. § 717r(b). In our view, however, this requirement, found in the judicial review provision of the Act, does not dictate the procedure to be followed, or the nature of the hearing to be held. It has to do with a court's review of the adequacy *vel non* of the evidence relied upon to support a finding, whatever the kind of hearing. True it may be that when rulemaking is based on written submissions the weight to be accorded the evidence may be affected by that method of presentation, but the standard of substantial evidence may be satisfied by written submissions.

A further comment would seem to be in order. As we stated in *Mobil*, 483 F.2d at 1251, 1253, the informal procedures of Section 553 of the APA and the more formal requirements of §§ 556 and 557, are not mutually exclusive. Moreover, they are not pre-emptive of available procedures. There may be occasions when rulemaking by notice, comment and reply, essentially as now before us, is all that is required insofar as the proceedings as a whole are concerned, but in particular parts a more formal procedure should be followed. As an example, the unsatisfactory state of the evidence on productivity could no doubt have been clarified one way or the other had the Commission subjected the submissions on reserves and reserve additions, so vital in arriving at the important productivity factor, to some method of testing their reliability and adequacy. Though we do not set aside the result reached on productivity our refusal to do so would rest upon us more comfortably had the data supplied by the American Gas Association withstood a more searching inquiry than was permitted under the procedures which were followed.

The Commission Was Not Disqualified to Issue Opinion No. 770-A

Although the matter was not raised before the Commission, the producers in this court contend that Opinion No. 770-A should be set aside and No. 770 reinstated. They urge this on the theory the Commission became disqualified to conclude the proceedings because of congressional interference with the decisional process pending the rehearing of Opinion No. 770 which resulted in Opinion No. 770-A. The producers rely upon *Pillsbury* v. *Federal Trade Commission*, 354 F.2d 952 (5th Cir. 1966).

The factual basis for the producers' position, in brief, is that while the rehearing was pending the members of the Commission were summoned before an Oversight Subcommittee of the House Committee on Interstate and Foreign Commerce and were subjected, particularly Chairman Dunham, to an intensive examination by Subcommittee Chairman Moss and Subcommittee Counsel Atkisson. Congressman Moss and three other Subcommittee members were parties to the proceedings before the Commission and as such had an interest in the Commission's decision on rehearing. At the Subcommittee hearing, particularly during the examination by Congressman Moss and Subcommittee Counsel Atkisson, the rationale of several important decisions underlying the rates established by Opinion No. 770 came under attack.[101] These decisions were among those subject to reconsideration by the Commission, and this occurred notwithstanding warnings that the issues were pending before the Commission on the rehearing, and despite objections from other Subcommittee members. The questioning was not confined to explication of "what the Opinion means and what its implications are." [102] Chairman Moss went further, stating:

> I am most committed as an adversary. I find that I am outraged by Order 770. I find it very difficult to comprehend any standard of just and reasonableness in the decision and I would not want the record to be ambiguous on that point for one moment.[103]

These expressions, coupled with Mr. Atkisson's adversarial interrogation about particular factors in the cost

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[101] (Attached.)

[102] Hearings on the Federal Power Commission Biennial Rate Decision Before the Subcommittee on Oversight and Investigation, of the House Committee on Interstate and Foreign Commerce, 94th Cong., 2d Sess., Aug. 27, 1976 (transcript at p. 1-4 "Comments of Cong. Moss").

[103] Hearings, *supra*, at p. 44.

analysis of Opinion No. 770, gave rise to the problem now considered.

In *Pillsbury*, *supra*, the court set aside a Federal Trade Commission ruling because of undue congressional interference. The case involved a Commission proceeding against a business concern for alleged violation of the anti-merger provisions of the Clayton Act. Violation turned, importantly, upon the correctness of a construction previously given to a particular provision of the Act in a procedural posture of the case which left open for final determination by the Commission, which had not been made, whether that construction should be adhered to. The previous construction was subjected to extensive and severe criticism by members of Subcommittees of both Senate and House of Representatives. The Chairman of the Commission, its General Counsel who later became Chairman while the proceedings were still pending, and other members of the Commission staff attended these hearings. In these circumstances, elaborated upon in its opinion, the court found the subsequent FTC decision was not consistent with due process of law because of this congressional inroad upon the independence of the Commission. The Fifth Circuit found that when a committee of Congress conducts an investigation that "turns directly and substantially upon the mental decisional processes [of an agency] *in a case which is pending before it*," the right of the parties to a decision free from even the appearance of impartiality is impaired. The court stated:

> To subject an administrator to a searching examination as to how and why he reached his decision in a case still pending before him, and to criticize him for reaching the "wrong" decision, as the Senate subcommittee did in this case, sacrifices the appearance of impartiality . . . .

Id. at 964.

When the problem came before the court, however, substantial time had elapsed since the congressional intervention, and, also, changes had occurred in the composition of the Commission. Although, in passing, the court made reference to a "rule of necessity" under which a decision impaired in such a manner might be left in effect since no other agency would be available to decide the litigated subject, the court did not resort to this rule to save the decision. *Compare Atkins, et al.* v. *United States*, —— F.2d —— (Ct. Cl. 1977). It set aside the decision, but in light of the changed circumstances and the passage of time, the court remanded the case to the Commission for reconsideration.[104]

We doubt the utility of classifying the rate-making undertaken in the present proceedings by the Power Commission as entirely a judicial or a legislative function, or a combination of the two, for in any event the need for an impartial decision is obvious. *See* Davis, Administrative Law Treatise, § 7.03. Congressional intervention which occurs during the still-pending decisional process of an agency endangers, and may undermine, the integrity of the ensuing decision, which Congress has required be made by an impartial agency charged with responsibility for resolving controversies within its juris-

[104] In our own case of *D. C. Federation of Civil Associations* v. *Volpe*, 459 F.2d 1231 (1972), also involving possible influence by a Conugressman in a matter pending for decision before the Secretary of Transportation the remedy applied in the circumstances was also to permit the Secretary to decide the matter upon remand solely without reference to the congressional intervention. However, we stated the controlling principle to be:

> that the decision would be invalid if based in whole or in part on the pressures emanating from

the Congressman. That case also, as in *Pillsbury*, involved a decision with respect to a single matter, unlike the very complicated case before us now with its numerous decisional facets not touched upon by the Subcommittee hearing.

diction. Congress as well as the courts has responsibility to protect the decisional integrity of such an agency.

Nevertheless, upon consideration of the whole setting in which the producers now present their claim of disqualification, we are led under settled principles to deny the producers the relief they seek. When Opinion No. 770 was pending on rehearing they concededly had knowledge of all the facts which they now assert had disqualified the Commission, except of course such changes as were made on the rehearing and stated in Opinion No. 770-A. Fully aware of the facts which are the only basis upon which the claim of disqualification can stand, the producers failed to call upon the Commission to disqualify itself. Not only so; they participated actively in the rehearing which led to Opinion No. 770-A, urging the Commission to adopt their positions with respect to several matters discussed in the congressional hearing, thus acknowledging the capacity of the Commission to act as an impartial tribunal. They not only failed to afford the Commission an opportunity to consider the claim of disqualification but waited until after certain modifications of Opinion No. 770 were made by Opinion No. 770-A, some but not all of which related to matters involved in the Subcommittee's intervention, to question the impartiality of the Commission. A party may not, with knowledge of the cause alleged to taint a proceeding with partiality, seek a favorable result at the hands of the allegedly disqualified agency and then, disappointed with the result, seek to bring about its nullification on the ground of partiality. The course the producers followed constituted an acceptance of the qualification of the Commission; their actions are inconsistent with a present claim of taint due to congressional interference.

We agree with the ruling of Judge Aldrich for his court in *In Re United Shoe Machinery Corp.*, 276 F.2d 77, 79 (1st Cir., 1960):

> a party, knowing of a ground for requesting disqualification, can not be permitted to wait and decide whether he likes subsequent treatment that he receives. As was said in *State ex rel. Shuffeldt* v. *Armijo*, 1935 39 N.M. 502, at page 506 (1935), 50 P.2d 852, at page 855,
>
> > A litigant cannot experiment with the judge presiding over the case.

The Fourth Circuit has stated the matter as follows in *Duffield* v. *Charleston Area Medical Center*, 503 F.2d 512, 515-516 (1974):

> A claim of disqualifying bias or partiality on the part of a member of the judiciary or an administrative agency must be asserted promptly after knowledge of the alleged disqualifications.,

citing a number of cases, including *Laughlin* v. *United States*, 80 U.S.App.D.C. 101, 151 F.2d 281, 284, cert. denied 326 U.S. 777.

In 15 U.S.C. § 717r is a provision that "no objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure to do so." Assuming for present purposes that this provision applies to the disqualification contention under consideration, which challenges Opinion No. 770-A in toto, it does not help producers. Since they had knowledge of the Subcommittee proceedings pending the rehearing no reasonable ground appears for their failure to urge their objection before the Commission.

Our denial of relief at the instance of the producers does not dispose fully of the problem. Independent of the status of the parties seeking relief we think it is obvious that within the equitable relationship between the reviewing court and the agency there resides—there

inheres—judicial jurisdiction, and responsibility in the public interest, to decide whether there occurred here such an inroad upon the integrity of the decisional function of the independent agency as to require the court sua sponte to set aside the whole or any part of Opinion No. 770-A. This necessitates our consideration of: the character and scope of the interference alleged; the fact that the parties who raise the disqualification question seem not to have deemed what occurred to impair the impartiality of the Commission itself independent of the result it reached; the fact that in one important respect, and indeed the issue that was most vehemently examined by the Congressmen, namely the correctness of the Commission's decision respecting the income tax component, the Commission left standing the disposition criticized at the Subcommittee hearing; the fact that there is nothing to lead the court to find that actual influence affected Opinion No. 770-A; and the fact that insofar as any actions of the Commissioners themselves are concerned no appearance of partiality is evident. In these circumstances we decline to set aside any part of Opinion No. 770-A sua sponte by reason of what occurred before the congressional Subcommittee.

In concluding as above we recognize the possibility, but not the probability, that what occurred may have influenced the Commission. We consider the intervention through the Subcommittee regrettable and quite inconsistent with that due regard for the independence of the Commission which Congress and the courts must maintain. Nevertheless, when weighed in the context of the record as a whole, the possibility of influence upon the Commission is too intangible and hypothetical a basis for this court of its own motion to nullify Opinion No. 770-A. We think rather that the interests of the parties and the public are to be served by our review of the Opinion under the applicable statutory standards and decisions of the Supreme Court.

APPENDIX

[101] The following excerpts from the hearing transcript illustrate the hostility of Moss and Atkisson to Opinion No. 770 and the depth and particularity of inquiry into the decisional process.

Mr. Atkisson. And one of those assumptions for the new process, is it not, is that the statutory maximum corporate income tax raised 48 percent, is that right?

Mr. Dunham. Yes.

Mr. Atkisson. Do you know of any major oil and gas producer that pays 48 percent income tax?

Mr. Dunham. In the assumptions, in the modeling techniques of this nature, there is no single producer that would fit exactly or precisely the exact model. It is well covered in the decision.

Mr. Atkisson. Name just one who pays 48 percent.

Mr. Dunham. I will be glad to look and see if there is one, but I assume some companies did pay 48 percent on the net taxes in proceedings. In other words, not everybody, all cases, were able to write off their total intangible costs against the depletion allowance.

Mr. Atkisson. But this opinion was written assumes that all companies pay the maximum 48 percent income tax rate, does it not?

Mr. Dunham. That is not correct, no sir.

Mr. Atkisson. Can you tell me how it does not? I thought surely it did say that it assumed the maximum rate of 48 percent as being paid on marginal income.

Mr. Dunham. Let me read the sentence on page 83 of the Opinion which is the paragraph starting "We recently reviewed the legal authorities." We say that once the appropriate deductions have been accounted for, the Internal Revenue Code specifically requires that an income tax be imposed upon the remaining income at the statutory rate for corporations. Forty-eight percent on income above $25,000 and those assumptions.

My point is—we are clear on this—that those assumptions were built into the modeling upon which the national rate calculations were made.

Mr. Atkisson. Let me ask you this, Chairman Dunham. Several years ago a subcommittee of the Senate, chaired by Senator Jackson, produced a report in the Permanent Subcommittee on Investigations of the Senate and they

examined the effective income tax rates of the seven largest oil and gas producing companies in this country.

These are figures from 1968 through 1972, bearing in mind the oil depletion allowance. In no instance did those companies pay that. In one instance 5.6 percent and in all other instances under five percent.

Yet the Opinion, bearing in mind that this rate applies only after the deductions—I realize you built that into your model, but it does assume these companies pay 48 percent and I don't think you can find a major oil and gas producer anywhere in this land that pays anywhere near it.

Mr. Dunham. I am trying to talk about the modeling and the calculations and the assumptions that you make in calculating the national rate. That is not dealing with a company by company basis. That methodology was discarded some 15 years ago.

Mr. Atkisson. Your cost model is supposed to reflect actual costs, is it not?

Mr. Dunham. Yes.

Mr. Atkisson. Is one of the problems here the fact that the Commission feels that it cannot examine so-called nonjurisdictional benefits? Is that one of the problems here? By that I mean benefits from operations of these companies that do not fall under the regulatory purview of the Commission, and in addition to that, is the foreign investment tax credit for example considered not part of your jurisdiction.

Mr. Dunham. That is right in this Opinion. I just point out these matters, the tax matters, particularly, are subjects of pre-hearing.

Mr. Atkisson. You alluded to earlier today the Supreme Court case, the *United Pipeline* case. Is it not a fact that in that case the Supreme Court specifically allowed the Commission not only the power but spoke of the duty of the Commission to consider actual tax costs and allowed it the power for that purpose to look at nonjurisdictional tax benefits?

Mr. Dunham. Well, I think there are many citations. If you wait a minute, I will find another citation.

Mr. Atkisson. Chairman Dunham—

Mr. Moss. This is not going to become a game of citations. You were asked to address yourself to a specific citation and you will do that, sir.

* * *

[Mr. Atkisson]. I don't think the nine gentlemen across the street have ever been overruled by a Commission before. Isn't this tantamount to overruling the Supreme Court?

Mr. Dunham. What page?

Mr. Atkisson. 749-C, pages 15 and 16.

Mr. Dunham. Of course the answer to the last part is you are absolutely correct. I don't think the 9 gentlemen have ever been overruled by this regulatory commission or any other.

Mr. Atkisson. I would like to reconcile the two positions. Do you not agree that the FPC has in effect overruled the Supreme Court in this Opinion?

Mr. Dunham. No, I do not agree to that.

Mr. Atkisson. Well, would you agree that the holding by the FPC which disallows and fails utterly to take into account foreign tax credits and non-jurisdictional tax benefits flies in the teeth of the United Pipeline case?

Mr. Dunham. On page 83 of 770, in footnote 185, we mention the foreign tax credit problem. This is one of the items as I understand it that is attacked in the hearing.

What we say in here is not at all relevant to the producer activity that we directly regulate. Sale of natural gas in interstate commerce, we could not apply profits from foreign oil operations to reduce the price of domestic natural gas, nor could we do the same indirectly by appropriating tax credits that are traceable solely to the foreign corporation.

Mr. Atkisson. Chairman Dunham, the Colorado case that I refer to, the United Gas Pipeline Company, simply does not say that. It says you have the power and the duty to consider those things. I don't think we should get into an exotic case.

* * *

Now, that is another item. IDC or the expensing of what you want, pre-production periods in fact even if you forget the jurisdictional problem, if you just look at gas production, isn't it a fact that no natural gas producer will ever come close to that 48 percent rate because he is going to continue to invest and produce?

Mr. Dunham. That is certainly right. I very much hope so.

Mr. Atkisson. That in fact has been the rationale of the opinion.

Mr. Dunham. One of the intents is that because there are two sides to this tax question there is the offsetting amount. If taxes are taken totally from the equation, from the modeling, that means as we did in this, we assumed that the intangible drilling costs would be offset, were used as an offsetting against the 48 percent statutory rate.

Therefore, if it were found that taxes could not be considered, it automatically follows that the write-offs of intangible costs would therefore not have to be added so we are talking about a net change here.

I don't know what that exact amount would be, but I am just pointing out that there are two sides to the equation which we assumed, and it would hopefully be true that whatever sums subject to taxation would be used to encourage more drilling, thereby achieving a write-off and no taxes being paid. That is one of the goals.

At pp. 49-55 of stenographic transcript.

* * *

Mr. Atkisson. Mr. Chairman, Commissioner Smith's dissent refers to the lack of consideration of gas payments that was referred to earlier today. I gather for those of you on the majority, three, that Commissioner Smith's dissent was not the first time you heard of the gas payments issue or in fact that it was the subject of concern in Opinion 770.

Indeed, a memorandum from the Chief Accountant of the FPC was referred to earlier in which that very thing was criticized. Why wan't this $600 million boon to the producers considered in the Opinion 770?

Mr. Dunham. I think the direct answer is of course it was considered and the topic is covered on page 143. At least we discussed the subject, and this again is another matter that is in the appeal.

Mr. Moss. But it is also a subject that has a direct bearing upon the order already issued by the Commission.

Mr. Dunham. Yes.

Mr. Atkisson. At page 143 is a response to the dissent is it not?

Mr. Dunham. Yes.

Mr. Atkisson. I just wondered why the issue of this enormous amount of capital we are talking about, two plus million dollars of interest free capital which because the pipeline companies can put it in their right rate base goes right through to the consumer which means that all the people in this room are lending that money to those companies and interest brings a tremendous advantage to the companies.

Mr. Dunham. I have to be careful I don't get too far into the issues, but as you know—

Mr. Moss. Mr. Chairman, I think we can put you somewhat at ease by saying we don't care about anything you might consider in the future. We only wanted to know what happened prior to the issuance, the facts that were considered prior to the issuance of Order 770.

What you do on rehearing or appeal is up to you, that is a matter to be discussed later but not now.

Mr. Holloman. Mr. Chairman, if I may address a statement?

Mr. Moss. Yes.

Mr. Holloman. It is my understanding that the advance payment issue was not raised in any of the comments in the record on this rulemaking but was raised the first time by Commissioner Smith in his dissent. It may be before us on rehearing, I have not looked at the comments that have been filed with respect to the rehearing, but—

Mr. Atkisson. It was raised by the FPC staff as I stated in my question.

Mr. Holloman. It was not raised by any of the parties to the proceeding but I would anticipate that it would be raised on the hearing and be given further consideration.

Mr. Moss. What does the staff have? Do you have that at all?

Mr. Dunham. Yes, staff puts in comments on all our proceedings.

Mr. Moss. Then it was raised and you were conscious of it. I would not want to have you account for something that you were not aware of.

Mr. Atkisson. I take it the argument was not that it is de minimis. If it turned out that consideration of advance payments affected the rate even by one penny, I trust you would be concerned because I think our staff

examination of the figures in your opinion indicate that one penny in the rate is equal to $10 million to the consumer, so it is hardly de minimis.

Mr. Dunham. I did not say that it was de minimis.

Mr. Atkisson. In the advance statement of Commissioner Smith, you pointed out that the assumptions at 770 were that capital costs to producers is 15 percent, is that correct?

Mr. Smith. Yes, sir.

Mr. Atkisson. Is that the majority too, Mr. Chairman? Isn't 15 percent assumed to be the capital cost?

Mr. Smith. Yes.

Mr. Dunham. Yes.

Mr. Atkisson. This is a small point. There are some figures and I direct your attention to the column 4. On the first figure there is an indication of the cost of long-term debt which is quite near the front of 8 percent. There is a footnote which indicates an ever lesser 7.7 percent. Isn't the real cost of capital to these giant companies a lot less than 15 percent?

Mr. Dunham. It is the weighted average if you go to the next column.

Mr. Atkisson. The weighted average of course is calculated on common equity. What I want to know is if Standard Oil of California goes to the Bank of America and asks for money, what is it going to pay? Their credit is pretty good.

Mr. Dunham. For debt money they pay approximately eight percent.

Mr. Atkisson. What percent?

Mr. Dunham. Eight percent

Mr. Atkisson. So it is not 15 percent?

Mr. Dunham. We did not say it was. I mean we assumed it in the weighted sense thereby calculating.

Mr. Atkisson. Maybe we are using words of art.

Mr. Dunham. The column before that, only 21.81 percent of their money consists of long-term debt.

Mr. Atkisson. You are assuming that for these calculations that the common equity is direct, is that it?

Mr. Dunham. No, no. Common equity is equity stock.

At pp. 102-105 of
stenographic transcript.

FAHY, *Senior Circuit Judge*, dissenting in part: I concur generally in the opinion for the court written by Judge Leventhal. While recognizing its excellence I do have a reservation respecting its treatment of the scope of review, thought to be required by the Supreme Court, particularly as it may seem unduly to relax our reviewing responsibility with respect to the standard which requires that essential factual elements of a Commission order be supported by substantial evidence.

There are two respects in which I differ from the result reached by the court: the treatment of the income tax components, and the treatment of advance payments outstanding on November 5, 1976 (past advance payments). Moreover, while I concur in the treatment of future advance payments, I find much merit in the producers' concern as to the mechanics of compliance with the Commission's order in that respect. Although we do not mandate clarification, it seems to me clarification is due.

THE INCOME TAX COMPONENT

I respectfully dissent from the court's approval of the inclusion in the rate for the gas from wells commenced in the 1975-76 biennium of an income tax component of 43.5¢ per Mcf, nearly one-third of the total rate. I dissent also from affirmance of inclusion of a tax component, similarly calculated, in the adjusted rate for gas of the 1973-74 vintage.

In *Permian Basin Area Rate Cases*, 390 U.S. 747, 791-2, one of the three responsibilities the Court placed upon the reviewing Court is the following:

> The court must examine the manner in which the Commission has employed the methods of regulation which it has itself selected, and must decide whether each of the order's essential elements is supported by substantial evidence.

The Commission in Opinions No. 699 and 699-H, in establishing the first nationwide rate for natural gas, refused to add an income tax component to the rates then established because there was no evidence of taxes paid, and because estimates would have involved unfounded speculation. The Commission endorsed, however, a special relief procedure should tax returns supply evidence warranting such an allowance. The Fifth Circuit affirmed, *Shell Oil Co., et al.* v. *F.P.C.*, 520 F.2d 1061, 1080-81 (1975), cert denied sub nom. *California Company* v. *F.P.C.*, —— U.S. —— (1976).

The Commission staff in the present proceeding similarly concluded that there was insufficient data on which to base an income tax component, and urged the Commission to obtain the necessary data. The industry resisted, and urged the present methodology as a substitute for actual income tax data, which it has refused to supply the Commission. It contends that the virtual repeal of the percentage depletion allowance, effective July 1, 1976, is sufficient reason for now including a tax component. The Commission, in setting a nationwide vintage rate for pre-1973 gas by Opinion No. 749, had previously included such a component—6¢ per Mcf in a rate of 29.5¢. This allowance, and the income tax liability it was intended to reimburse, were calculated by treating jurisdictional-producer activities as a separate entity and applying the maximum corporate statutory tax rate of 48%. Identical methodology is carried forward in the present proceeding, without the support of any historical tax-paid or current tax-liability data, and without any provision for gathering such data as it accumulates.

In substitution for such evidence the Commission employs in its model the 43.5¢ per Mcf component based on a mathematical calculation which, I suggest, does not meet the test of substantial evidence. The component is arrived at by calculating the increment to price which,

when added to the amount of other recoverable costs, will yield an amount of income sufficient to permit income taxes to be paid at the 48% statutory rate and still enable the producer to earn a 15% rate of return on its ratebase.

It is well to remind ourselves that the rates which include these income tax components are defended by the Commission as entirely cost-based:

> This rate [$1.42] is fully cost-based and justified. Additionally, non-cost factors have been examined to ensure that the cost-based rate is just and reasonable.

Opinion No. 770, at 1.

> The $1.42 rate is fully cost-justified, as is the $0.93 rate.

Opinion No. 770-A, at 3; *and see, Id.* at 13-14.

Thus, in contrast with the 52¢ rate involved in the "roll-over" problem discussed in Judge Leventhal's opinion for the court, none of the tax component is justified by the Commission as stimulating new supplies of gas or on any ground other than that it is needed to cover income taxes. It may not, therefore, be reassigned by the court to any other purpose. Moreover, it has no particular relationship to the gas shortage unless it enables the industry actually to recover whatever it expends as tax costs and still earn a 15% rate of return.

I have no doubt that by repeal of the percentage depletion allowance Congress sought to obtain increased income taxes from the petroleum-gas industry, nor do I doubt that in light of the repeal the Commission is well within its authority in reconsidering its treatment of the income tax problem. Yet neither the need to do so nor the likelihood of increased tax liability justifies an allowance which fails to be supported by substantial evi-

dence, or which otherwise is unacceptable. Large sums are being or will be paid by consumers without assurance of their need or use for the purpose for which paid.

As indicated above, the Commission model is framed in the belief that "regulated activities are properly viewed as a separate corporate entity and the Federal income tax allowance computed accordingly". The very complexity of determining exactly how much tax is paid by producers in any given year due to a specific vintage of jurisdictional gas renders the separate entity policy unreliable. The computation of the component proceeds as if all producers of jurisdictional gas engage only in finding, drilling, producing and selling gas in interstate commerce. This fails to take account of the fact that a great amount of gas weighted with this 43.5¢ per Mcf tax cost is produced by integrated corporations such as Exxon, Mobil, Texaco, Gulf and Shell, engaged in a variety of far-flung non-gas activities through divisions, affiliates, and subsidiaries. Under the Internal Revenue Code of 1954 they may file consolidated tax returns aggregating all those operations, thus rendering inapplicable the separate entity theory. Moreover, such producers, as well as producers whose corporate operations are limited to gas production, market gas in the intrastate as well as the interstate market. While the income tax returns of the latter are not complicated by non-gas activities, as are the consolidated returns of the larger companies, both types of producers earn taxable income on production from, and deduct as expenses preproduction outlays related to, reserves which may be dedicated to the intrastate market. Deductions stemming from non-jurisdictional gas production will also be applied by the producers against all income, including that from jurisdictional sales. The model thus fails in two distinct ways to take account of the situation which pertains in reality, and by doing so does not justify charac-

terizing the component as a recoverable cost supported by substantial evidence.

If the 43.5¢ per Mcf for the 1975-76 vintage gas does not become a part of the income tax revenues, but is retained by the producer because deductions or losses in its operations as a whole have reduced or eliminated its taxable income, money is being collected from consumers to pay taxes but it is not finding its way to the Treasury. The action of the producer in using the non-jurisdictional deductions to reduce or eliminate its taxable income deprives the Commission's separate entity policy of reality. The point is not whether the deductions are lawful, but whether in establishing a rate the Power Commission should itself follow a method which results in including an amount for income taxes to be borne by consumers which does not have the support of evidence that it is needed for income taxes. Unlike all other recoverable costs, the tax cost of producing gas cannot be determined until after production has begun and taxable income earned, a fact which the Commission's model ignores in establishing the component and in failing to provide for its correction.

If the component were required by the Commission actually to be utilized to pay income taxes in the amount the model attaches to each Mcf of gas, or to be refunded, the expectation of increased revenues following upon Congress' repeal of the percentage depletion allowance might be realized. But under the model—under the Commission's Opinions—the producer is free to avoid paying or assuming liability for the full computed amount because of: 1) higher-than-anticipated jurisdictional expenses; 2) allowable deductions or tax losses associated with non-jurisdictional pre-production activities, or 3) tax benefits associated with non-gas operations on a consolidated return. Biennial review of rates is not a substitute for substantial evidence, nor is the fact that biennial rates

for later vintages might be lowered compensatorily in the effort to correct error. Moreover, the component authorized is not a temporary arrangement. Revision can only be made prospective for the remainder of the fifteen-year well life.

Furthermore, as noted above, the Commission has made no provision for ascertaining what in reality occurs as to payment of or liability for income taxes, so as to be able to adjust the 43.5¢ component. There is no collection of evidence of the actual taxable income of even a sample of producers, or of the share to be allocated to each biennium of jurisdictional gas. Specific types of offsets and deductions are not even charted in an effort to assure that the model is complete and kept up-to-date. It is not sufficient to say that the model has room for every tax benefit and payment conceivable under the Code; it must be shown that the component calculated by the model is based upon the tax events actually in use. The model postulates only an assumption of tax liability based upon sale price in interstate commerce and expected deductions; it does not reflect what turns out to be the taxable income of the producer when it files its return or compare taxes paid with the sums collected from consumers. And yet the amount of the theoretical component is laid upon the consumer in dollars and cents for the life of the producing wells without provision for testing its accuracy by evidence either existing or to be obtained.

A somewhat more technical series of problems with the tax component arises when the assumptions underlying it are compared with the expenditure-timing assumptions of the discounted cash flow model. Examining the Commission's model, capital formation is deemed to occur at time —3, well commencement at time —1, first production at 0, and depletion (end of production) at +14. For 1975 well commencements (the first half of the biennium), 17% of all preproduction expenses per Mcf are

deemed to be incurred in the year —3 (1973), 31% to occur in the year —2 (1974), and 51% to occur in year —1 (1975, the well commencement year). But income from those wells does not commence to flow until year 0 (1976), according to the model. Expenses and income for wells commenced in 1976 (the second half of the biennium) would occur at the same assumed ratios but one year later. Thus taxable income would not be earned by gas from wells commenced during the 1975-76 biennium until 1976-77 at the earliest, and would not be reported until 1977-78. Thus, the tax component which has been collected on biennial gas since July 27, 1976, could not be tested for accuracy against taxes paid until after corporate returns were filed in 1977-78. In practical fact, this argues against a tax component set in one proceeding and later adjusted, because of the long interval during which consumers must pay the unadjusted tax component.

According to Exhibit 4 to Opinion No. 770-A, preproduction expenses made in year —3 and in year —1 constitute the tax reductions from expensing. Thus, when wells commenced in the 1975-76 biennium begin to produce and generate otherwise taxable income in years 1976 and 1977, that taxable income will be reduced by preproduction expensing in the —3 year of wells to be commenced in 1978 and 1979, and such expensing in the —1 year of wells commenced in 1976 and 1977. As indicated above in general terms, it is the amount of those preproduction expenses that will determine (absent any other, hidden complications) whether a net tax of 43.5¢ per Mcf will be paid. This contingency would remain, even if the Commission's unrealistic view of jurisdictional gas taxable as an entity were true.

The Commission does realize that even if its model does not understate jurisdictional preproduction expenses for successive years, producers may not pay the full 43.5¢ per Mcf tax share when taxes are computed in the real world with reference to non-jurisdictional or non-gas activities.

> [producers'] tax liability may also differ [from 43.5¢ per Mcf] because . . . their tax situation is different than we would expect it to be on the basis of jurisdictional activities. If it is so because of non-jurisdictional activities which result in tax losses or credits, such factors lie beyond our jurisdiction.

Opinion No. 770-A, at 68. This admission by the Commission would seem to act as a bar to the single entity model.

I think that to the extent the Internal Revenue Code permits, and producers, not adopting the separate entity concept in calculating their tax, and not paying to the United States the tax component recovered from consumers under that concept, take advantage of the offset of income tax liability afforded by non-entity activities, the Commission should not treat the jurisdictional operations as a separate entity and should allow only special relief according to income taxes assumed in fact by the producers. Where producer-by-producer regulation has of necessity given way to regulation by a model based upon nationwide averages, that model should not, it seems to me, ignore the fact that some producers will file tax returns merging jurisdictional and non-jurisdictional activities, or mingling gas operations with non-gas affiliates' activities (the consolidated return situation).

The propriety of including a tax component in the regulated interstate rates for natural gas depends solely upon whether the producer has in fact paid or becomes liable for the amount of the component. If not, it is as improper a cost component to be recovered from consumers as is an overstated cost for drilling rigs, labor or capital. By permitting a possibly overstated tax component to be collected, without determining if a like

amount of taxes per Mcf is to be paid or liability therefor assumed, the Commission may enable the industry to enjoy funds received from consumers to compensate for costs which in fact are not incurred. Since no part of the tax component is related to incentive, any excess of it above actual costs, "would merely confer windfalls"—*Permian*, 390 U.S. at 797.

While the Tax Reduction Act of 1975 did not in terms deny oil and gas producers the statutory option of a consolidated return, neither did it entitle them in my view to a combination of taxes lowered by consolidated returns and federal rate regulation premised upon reimbursement for maximum taxes otherwise calculated. However producers ratably lower their tax liability allocated to jurisdictional gas for a given vintage, taxes actually due should constitute the upper limt of reimbursement demanded of consumers.

I disagree with the tax component as incorporated into the 1975-76 and 1973-74 vintage rates because the method employed to calculate the sums collected from consumers —jurisdictional gas allegedly to be treated as a separate entity, vintage-by-vintage—differs substantially from the method employed by producers to calculate taxes owing and paid—a flat percentage of all taxable income pooled without respect to whether earned by jurisdictional gas, non-jurisdictional gas, or non-gas activities.

As we have indicated, the means approved in *Shell* by which tax costs could be recovered by producers could now be reinstated; it does not appear that it resulted in hardship to producers. If a better means consistent with the substantial evidence requirement can be devised, we should of course accept it. Producers are not to be deprived of the right to recover their income tax costs. And here, as in other aspects of national rate-making, averaging is accepted, exactitude is not required and reasonable inequities are tolerated in deference to the

over-all interests to be served. Moreover, experiment may be utilized, but when the task is to ascertain costs experiment is not a substitute for evidence, nor is ease of administration in the circumstances; the industry has access to the evidence, has the burden of proof, and of course is capable of making the evidence available for consideration by the Commission.

At this time of deepening concern over the shortage of natural gas, with consequent economic and even more personal burdens to be borne by consumers, it seems especially important that these burdens not needlessly be increased by the tax components here discussed. As Commissioner Smith said with respect to the rates as a whole, I think these particular components are "too high" in the absence of factual evidence supporting them.

While the Commission, as it states, does not have jurisdiction over non-jurisdictional activities it does have jurisdiction to consider their effect upon what if any tax component should be established. See *F.P.C.* v. *Conway Corp.*, 426 U.S. 271 (1976). In that regard we are entitled to know what income taxes the regulated sector of the industry pays or assumes which are attributable to its jurisdictional operations. This the modes does not disclose, and the Commission does not undertake to ascertain.

References in Judge Leventhal's opinion to my above dissenting views lead me to add the following:

The court states that implicit in my concern about this matter is an assumption of losses in non-jurisdictional gas activities of producers, and the court attributes to the Commission a finding of implausibility that the producers as a whole would sustain losses in their unregulated gas activities while making gains in sales of federally regulated gas. I read the Commission's opinion at the point to which the court refers only to find im-

plausible that such losses will ever exceed all non-jurisdictional income. My position regarding the use by producers of any deductions or losses due to their unregulated activities, as such use bears on our income tax problem, has been stated. See particularly p. 8, *supra*. It should be noted that my concern with this question is not entirely focused upon a producer's non-jurisdictional gas operations, but also upon losses which might occur from the variety of other operations of corporate conglomerates which may file consolidated returns. And even in the absence of non-gas losses, heavy expenditures of drilling and other pre-production activities for wells which later produce non-jurisdictional gas are permitted to offset current jurisdictional income.

As to the court's position that the parties can bring to the Commission's attention other tax events that reduce the producer's tax liability so that the model can be refined and flaws remedied, I have several problems. First, the burden has been and remains upon the producers to establish tax liability in actuality commensurate with the 43.5¢ per Mcf allowed to be collected. The Commission's position rests entirely upon the model without any contemplated Commission testing of it against actual data respecting taxes paid or for which liability accrues. The court's approach might result in a wholly unjustified tax component being charged because consumers do not have access to the evidence upon which income taxes are based, and cannot prove the component to be excessive. Second, nothing in the Commission's opinions nor in the court's opinion would supply, or require to be supplied to consumers, the evidence about tax events or transactions employed by producers to calculate their taxes. The Commission did not examine such evidence in establishing the 43.5¢ component, and does not indicate any intention to obtain it so as to refine that component at the two-year mark (biennial review). It is more likely that the component may be revised, within the plan of the model, when predictably higher drilling, leasing and other costs will be applied, all without examination of any actual tax-accrual data.

My reference to the unavailability until 1977-78 of tax returns pertaining to revenues from wells drilled in the recent biennium affords no basis for approving now the present tax components or for assuming, as the court seems to, that tax returns when filed will be made available to the Commission. Given the methodology employed, I doubt the wisdom of trying to calculate, prior to accrual, an accurate tax allowance. But if, as the court suggests, some tax component should be allowed to be collected before the tax accrues, I should be willing to consider an interim conditional amount, subject to refund or other appropriate adjustment consistent with the substantial evidence rule, were the court willing to do so.

The court's opinion endorses the Commission view that it is extremely difficult, even with tax returns in hand, to tell how much tax has been paid upon income earned by jurisdictional gas from a specific vintage. How much more difficult it must be to estimate that amount before any tax accrues, and yet that is what the Commission's model purports to do, and what the court affirms, with no provision for verifying the correctness of the estimate by actual tax-paid or tax-accrued data.

Past Advance Payments

I also respectfully dissent from the court's approval of the Commission's failure to give effective consideration to the advance payments which were outstanding at the time of the issuance of Opinion No. 770-A, November 5, 1976, and which have not yet been fully repaid (past advance payments). Some $1.5 billions of capital had been supplied to producers during the 1975-76 biennium, prior to July 27, 1976. An additional un-

quantified amount of advance payments was received from pipelines by producers during the 1973-74 biennum, and earlier, back to 1970. All these contributions of capital were supplied ultimately by consumers due to the addition of sums thus advanced to the ratebases of the advancing pipelines. Very substantial savings of producers' capital costs resulted. It is unclear under the Commission's costing model which biennium of gas ought to be associated with cost-free capital received in a given year. But as Commissioner Smith pointed out in his dissent in Opinion No. 770-A, the producers have continued over a considerable period to have the use of the capital so provided and not repaid in cash or gas. Nevertheless, Opinion No. 770-A takes no account of these savings in its cost calculations which led to the 93¢ base rate for the 1973-74 vintage, and to the $1.42 base rate for the 1975-76 vintage. Nor does it indicate that those cost savings are associated with some future gas vintage, base rates for which are to be set in some future proceeding. The only justification for this failure offered by the Commission is as follows:

> * * * it would be improper to penalize a producer without any prior notice by reducing its prospective rates because of its prior acceptance of advance payments under a Commission-approved program. Furthermore, these outstanding payments have provided additional capital for exploration and development activities, during the period (January 1, 1973 - July 27, 1976) when the rates collected were below the levels which we herein have determined to be just and reasonable.

Opinion No. 770-A, at 150.

While the payments were made under a Commission-approved program, also judicially upheld as the court has noted, neither of these approvals gave assurance that the savings in cost resulting from the advance payments would not be considered in a subsequent proceeding to

establish cost-based rates. In initiating the proceedings the Commission was not under a duty to specify all items affecting costs which might be considered, nor barred from consideration of an item not specified in the notice. The Commission's brief, in rejecting the objection that no notice was given that the Commission would restrict the new $1.44 per Mcf rate to gas from wells commenced after January 1, 1975, states:

> [T]he Commission gave no assurance that there would not be changes and modifications based on actual experience.

Br. at 50.

We can well substitute for "actual experience" "a known factual situation." We think this is particularly appropriate with respect to a cost factor. Some $2.2 billions of advance payments were outstanding when Opinion No. 770-A was issued, November 5, 1976. As Commissioner Smith's dissent points out, ". . . the producers have had the continuing use of capital provided by advances made previously that have not been repaid." Opinion No. 770-A, at Dissent, p. 15. Not only had Commissioner Smith raised the advance payments question in his initial dissent to Opinion No. 770, but it was raised by petitions for rehearing, as well. Senator James Abourezk, et al. (Congressmen) pressed the issue strongly, contending:

> The Opinion's calculations are premised on the assumption that the cost of capital to producers is 15%. To the extent that advance payments have been available as capital, the premise is not correct. The rate allowed producers must be adjusted downward in consideration of the advance payments.
>
> . . . . The rate is a biennial rate, for 1975-76, and must be based on costs for that period. Indeed, it is strange that the Commission premises its $1.01 rate for 1973-74 gas on a post hoc actualization of 1973-

> 74 costs, while, in its treatment of advance payments, it argues that actual costs must be ignored. . . . The consumer is certainly not protected by a willful decision to ignore dollars he has contributed to the industry.

R. 2785. Similar objection was made by the South Dakota Public Utilities Commission's petition for rehearing. R. 3064.

Moreover, adequate notice to producers that cost savings from receipt of advance payments would be factored into relevant rates inheres in the fact that the Opinion No. 770 series is a cost-based ratemaking.

As we have seen, the Commission also stated as a reason for not otherwise considering past advance payments that they provided additional capital for exploration and development from January 1, 1973, to July 27, 1976, "when the rates collected were below the levels which we herein have determined to be just and reasonable."

The above reason if acceptable would limit the effect of past advance payments to the years immediately preceding issuance of Opinion No. 770-A. By the Commission's own model, however, assembly of capital takes place two years before drilling commences, and three years prior to first production. While during the period January 1, 1973, to July 27, 1976, the 52¢ rate set by Opinion No. 699-H (or a lower earlier rate) had not been superseded by the 93¢ and $1.42 rates found to be just and reasonable by Opinion No. 770-A, the outstanding capital advanced to producers since 1970 may be found to be associated with the gas of the 1973-74 vintage as well as with that of the 1975-76 and subsequent vintages. Clearly it would appear that the value of the outstanding capital advances extends into the period covered by the present higher rates, and perhaps to the rates to be set for the next biennium. The present rates are based upon cost and a reasonable rate of re-

turn. In arriving at the rates the Commission included a cost factor representing the cost of capital, without evidencing any value attributed to the savings to producers of the cost-free capital supplied by past advance payments then outstanding. The reasons given for this omission do not justify it. Further consideration in my opinion accordingly is required of the possible impact of these payments upon the cost-of-capital component included in the rates established by Opinion No. 770-A.

I do not forecast the result of further consideration by the Commission. If it leads to attaching a value to the capital thus supplied which should be but has not been accounted for it is possible that an additional carrying charge credit or some other mechanism should be developed. Consideration might, or might not, lead also to a possible distinction between producers who received the payments and those who did not. The Commission of course should reach its determination with the aid of submissions by the interested parties.

The substance of the matter is that I cannot agree that either of the reasons advanced by the Commission justifies the present situation. Aside from the question of notice previously discussed, the general and unanalytical statement by which the Commission disposed of the issue of possible impact upon the new rates of some billions of dollars of outstanding advance payments does not seem to me to be an exercise of the expertise or discretion which calls for our deferential acceptance.

APPENDIX B

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

THE SECOND NATIONAL NATURAL GAS RATE CASES

No. 76-2000, et al.

AMERICAN PUBLIC GAS ASSOCIATION, et al., PETITIONERS

v.

FEDERAL POWER COMMISSION, RESPONDENT

ON PETITIONS FOR REHEARING

Filed August 17, 1977

Before FAHY, *Senior Circuit Judge*, LEVENTHAL, *Circuit Judge*, and GERHARD A. GESELL,* *United States District Judge* for the United States District of Columbia

ORDER

On consideration of the petitions for rehearing filed by American Public Gas Association, et al; Austral Oil Company Incorporated and Aztec Oil & Gas Company; Commonwealth of Pennsylvania; and Congressmen petitioners, it is

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* Sitting by designation pursuant to Title 28, U.S.C. § 292(a).

ORDERED by the Court that the aforesaid petitions are denied.

Per Curiam

LEVENTHAL, Circuit Judge, joined by GESELL, *District Judge*: The Petitions for rehearing that have been filed [1] do not require an opinion to supplement or repeat the already long opinion of June 16, 1977.

We write rather to say that the concerns that trouble our distinguished colleague, and occasion a further word from him, also trouble us; but in our view they cannot control the decision in this case.

It is hardly disputed that there will be some considerable increase in taxes paid by the industry. That is what Congress and the people wanted. The only fairly disputable point is—how much? However, if the Commission were confined to a doctrine strictly insisting on evidence of "actual taxes paid," the plain fact is that, at a time when the nation cannot tolerate any undue block to gas supplies, producers selling to the interstate market would have to forego any price increase whatever notwithstanding an inescapable income tax cost increase of considerable extent.

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[1] By APGA, et al; Congressmen petitioners (Abourezk, et al.); Commonwealth of Pennsylvania; and by Austral Oil Co. and Aztec Oil and Gas.

The Austral-Aztec petition, which deals with replacements for indefinite term contracts, questions whether its contention can soundly be rejected on a theory of preserving a bargain. This particularized question may merit further reflection, but in the last analysis the court is of the view that there are considerations both ways and the primary responsibility for decision must be left to the agency.

The court's opinion sanctions the use of a model as substantial evidence, but it contemplates that this model will be subject to the test of experience. If a flaw in the model is revealed, then there can be (slip opin. pp. 48-9) an adjustment for the future, an adjustment readily approached through withholding the benefit of future escalations. While this will not affect prices for gas already delivered, it would have substantial impact, and if error is found would forestall an undue perpetuation. It strikes a balance that is, in our view, in "the interest of justice." 28 U.S.C. § 2106.[2]

[2] The reference to § 2106 does not imply, as some petitioners for rehearing suppose, that the court has discarded the requirement of substantial evidence to support the Commissioners' findings and result. The court does feel bound in application of that standard to give deference to the Commission if it has asked the right questions and sought answers, and if it relies on material that is reasonably regarded as substantial in finding the answers. In the circumstances and with the information at hand, the economic model is substantial evidence. In the light of experience, the standard of substantial evidence might require the agency to take a different course.

FAHY, *Senior Circuit Judge*: Though a rehearing is denied, I take this opportunity to explain further one aspect of my dissenting views about the income tax components under consideration.

Establishment of nationwide rates for jurisdictional gas unavoidably strains the efficacy of the Natural Gas Act to support the effort; the Act was enacted long prior to contemplation of such a development. Realizing the situation, the court must be as open-minded as is reasonably possible in seeking authority in the Act to accommodate the Commission's difficulties in such an undertaking. However, the Act is not open-ended; and it remains, as originally purposed, primarily protective of the consumer interest. While the nature of this interest may vary with the times, an inexorable standard binds Commission and court: Essential elements of a rate order must be supported by substantial evidence. This applies to the dollar amount of an essential rate element as well as to the inclusion of the element in the rate structure.

The amount of an income tax component in a nationwide rate must achieve a reasonably close relationship to the amount a representative group of the producers are required to pay, or to assume liability for, as their income taxes. This reasonable relationship may be found consistently with the substantial evidence standard when a tax component is mathematically calculated as an estimate of taxes per Mcf of jurisdictional gas, subject, however, to verification or modification grounded in substantial evidence of actual income tax data.

Here, the record contains no data that the 43.05¢ per Mcf tax component included in the rate for 1975-76 vintage gas, for example, is reasonably comparable to any income taxes which have been or are being paid or assumed by such a representative group of producers. Concededly, the record contains no data of actual payment or assumption of liability in any tax return filed with

the Internal Revenue Service by any producer or by a cross-section of producers representative of the national industry involved. The model does incorporate evidence of certain other costs to be recovered by producers in the rate. On that foundation the model then proceeds to calculate that to enable the producers to recover those costs and also to earn a 15% rate of return they must realize such an amount of income from the rates to be charged as will enable the producer to meet an income tax liability of 43.05¢ for each Mcf of jurisdictional gas sold. This calculation does not proceed from or incorporate actual tax data such as I have previously referred to. The resulting component, then, is entitled at most to the status of an estimate of such income taxes as producers might be called upon to assume. I do not now revert to the difficulties mentioned in my dissenting opinion in arriving at definite jurisdictional tax costs under the separate entity theory; those difficulties aside, I now assume *arguendo* that the Natural Gas Act would permit the court, in light of the difficulties encountered by the Commission in establishing a nationwide rate, to accept such an estimate as supported by substantial evidence. By definition, however, in this on-going context, the estimate is not an acceptable basis for a component unless it is tested for its correctness by the Commission's resort to what develops factually regarding the actual income taxes of producers. Yet here the Commission, neither by the model nor by any other means, provides for such verification or correction. The model does provide for readjustment of other cost factors in the light of experience, at the next biennial review, but not for readjustment of the income tax component on the basis of the experience of a reasonably representative cross-section of the industry in actually paying, assuming liability for, or in not paying, income taxes as evidenced by returns filed with the Internal Revenue Service or in any other evidentiary manner. To revise the tax component in some other manner, as by simply adjusting the figures for non-tax costs included in the formula originally used to calculate the component, does not test it against actual tax-liability experience and is wholly inadequate to verify or correct the estimate. In this situation—in the context of this rate proceeding—I think the court should hold not only that the income tax components lack the support of substantial evidence as a definite reckoning of recoverable tax costs,[1] but that neither the Opinion nor the model contains verification or modification requirements which establish the components as legally acceptable estimates. To permit their continuing and indefinite collection from consumers without testing their accuracy in the manner suggested above I think we should also hold is not within the discretion available to the Commission under the Natural Gas Act.

This problem in my opinion calls for resort to the outstanding and accumulating evidence respecting income taxes, and for its analysis by the Commission in a manner to enable it to reach a satisfactory conclusion respecting the subject on the basis of the most important evidence relevant to it and which is in the possession of the regulated industry or is under its control. One must know what is actually the situation, at least to a reasonably degree, to reach a just and reasonable conclusion about it. It seems to me that simple justice requires that the amount the consumer ultimately pays to enable the producer to recover its income tax must be supported by tax payments or accruals evidenced by tax returns or

[1] In the context of this proceeding, where the most relevant facts as to income taxes are in the possession of the producers, but not available to the Commission in arriving at the income tax components, a fair application of the substantial evidence standard requires the court in my opinion to withhold deciding that the standard is complied with unless and until this evidence, which may refute the accuracy of the components, is made available.

other supporting data, reasonably representative of the situation. The question in the end is whether such evidence justifies a tax component included *a priori* in the rate. The integrity of the model as an answer to this question has not yet been established, or required to be established by the Commission or the court. It is neither just nor reasonable in my opinion to make the model the master regardless of those facts.[2]

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[2] The court's opinion states in its footnote 33 that natural gas consumers should not "pay less" for gas simply because, for example, a producer such as *Mobil* loses money in a nonjurisdictional enterprise. This simplistic justification for the present tax components based upon the separate entity theory used to establish them ignores the failure of the producer to adopt that theory in computing its income tax. When a consolidated return is filed, losses due to nonjurisdictional non-gas activities are used to reduce taxes which the single entity theory would require to be paid. Moreover, the court assumes that the present "pay more" rate borne by the consumer for the purpose of covering the producer's income-tax cost has already been validly established in an amount comparable to that cost. My concern is also that the "pay more" component may be used by the producer, in whole or in part, not to pay its income tax, but to recoup losses as to which neither Commission nor court has knowledge whether such losses are related to the cost of producing and marketing jurisdictional gas.

APPENDIX C

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

SEPTEMBER TERM, 1976

[Filed Aug. 17, 1977, United States Court of Appeals,
for the District of Columbia Circuit,
George A. Fisher, Clerk]

No. 76-2000 et al.

THE SECOND NATIONAL NATURAL GAS RATE CASES
AMERICAN PUBLIC GAS ASSOCIATION, ET AL., PETITIONERS

v.

FEDERAL POWER COMMISSION, RESPONDENT

Before: BAZELON, *Chief Judge*, FAHY, *Senior Circuit Judge*, WRIGHT, MCGOWAN, TAMM, LEVENTHAL, ROBINSON, MACKINNON, ROBB and WILKEY, *Circuit Judges*

ORDER

The several suggestions for rehearing *en banc* having been submitted to the Court, and a majority of the circuit judges in active service having recused themselves, all suggestions for rehearing *en banc* filed in these cases are denied.

For the Court:

/s/ George A. Fisher—By SMC
GEORGE A. FISHER
Clerk

APPENDIX D-1

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

SEPTEMBER TERM, 1976

No. 76-1694

AMERICAN PUBLIC GAS ASSOCIATION, *et al.*, PETITIONERS

v.

FEDERAL POWER COMMISSION, RESPONDENT

Before: FAHY, *Senior Circuit Judge*; LEVENTHAL and ROBINSON, *Circuit Judges*

ORDER

Upon *sua sponte* consideration, and in order to avoid the possibility of confusion with orders in other pending dockets, and it appearing that "final decision by the Commission on any application for rehearing under 15 U.S.C. § 717r(a)" having been made by issuance of Commission Opinion No. 770-A on November 5, 1976, it is

ORDERED by the Court that the stay entered by order of this Court in this matter on August 9, 1976, is terminated.

Per Curiam

APPENDIX D-2

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 76-2000

AMERICAN PUBLIC GAS ASSOCIATION, ET AL., PETITIONERS

v.

FEDERAL POWER COMMISSION, RESPONDENT

BEFORE: Fahy, Senior Circuit Judge; Leventhal and Robinson, Circuit Judges

ORDER

On consideration of petitioners' emergency motion for extension or expansion of the court-ordered emergency stay of Opinion No. 770 and respondent's opposition thereto, it is hereby

ORDERED that until further order of the court, in the absence of a provision in the Commission's order (Opinion No. 770, as amended in Opinion No. 770-A) for refund of rates charged if subsequently held unlawful, in whole or in part, the court issues a stay restraining the effectiveness of Commission Opinion No. 770, as amended by Commission Opinion No. 770-A, provided, however, that the stay is not applicable insofar as the rate increases authorized in said opinions and orders are applied to and invoked by producers that incorporate an undertaking to refund to their pipeline customers (for passthrough by them to distributor companies and ultimate consumers) any portions of the

rate increases, authorized by said opinions and orders accompanied thereby, which are subsequently held to be unlawful.

FURTHER ORDERED that the court will hear oral argument at 9:30 a.m., Thursday, November 11, 1976, on the petition for emergency relief above referred to, and on whether the stay herein granted shall be continued. Each side will be allotted one half hour, subject to expansion by the court as justice may require. It is

FURTHER ORDERED that respondent Federal Power Commission file with the court no later than 4 p.m., Wednesday, November 10, 1976, a full response to the merits of the motion for stay of the rates set forth in Opinion No. 770-A or continuation of the refund provision with respect thereto. It is

FURTHER ORDERED that all persons addressing the emergency motion by briefing shall file their papers no later than 4 p.m., Wednesday, November 10, 1976. It is

FURTHER ORDERED by the court that the court will not now pass upon the multiplicity of papers which have been filed in the various other dockets seeking review of Commission Opinions No. 770 and 770-A, but will, for convenience, consider all such matters in this docket. All persons who have raised questions with respect to these Opinions are granted leave of court to present them herein.

Per Curiam

[Filed November 9, 1976]

APPENDIX E

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 76-2000

AMERICAN PUBLIC GAS ASSOCIATION, ET AL., PETITIONERS

v.

FEDERAL POWER COMMISSION, RESPONDENT

Before: Fahy, Senior Circuit Judge; Leventhal and Robinson, Circuit Judges.

ORDER

This order is entered upon consideration of petitioner's emergency motion for extension or expansion of emergency stay ordered by this court in Docket No. 76-1694 on August 9, 1976, respondent's two responsive pleadings in opposition thereto, petitioners' reply thereto, the numerous other pleadings filed by intervenors herein and by parties in related dockets appearing herein by leave of court, the orders of this court previously entered herein, and upon the oral argument held before it.

The court has reached the following decision:

1. The temporary stay order entered by this court on November 9, 1976, is hereby terminated as to gas produced from onshore wells commenced, "spudded," or drilled after July 27, 1976.

As to such "new gas," the Commission relies on its view that there is an overriding public interest in secur-

ing new dedications to the interstate market. It is the court's view that such gas would be subject to possible refund in the event the Commission's order accompanying Opinion No. 770, as amended by Opinion No. 770-A is held invalid, or partly so, even in the absence of a specific incorporation of a refund obligation to that effect by the court at this time. Such specific incorporation, however, the Commission argues, may deter interstate dedication of gas and confine new gas dedications to intrastate markets, and there it could be put exclusively to industrial use without being subject to Commission allocation for higher priority use, all detrimental to the public interest in present circumstances of gas shortage. The court takes note that the parties opposing a stay as to new onshore gas include the Public Service Commission of the State of New York, the United Distribution Companies, and the Associated Gas Distributors.

2. Except as to the gas covered by paragraph 1, the stay entered November 9, 1976, is continued in effect pending further order of the court, provided, however, that the use of any refunds which might accrue thereunder shall be subject in the first instance to consideration by the Commission, its conclusion with respect thereto being subject to court review.

(a) As is made expressly clear in the court's November 9 order, and as was the intention of the August 9, 1976, order in Docket No. 76-1694, the court's order is directed to the Commission, as the order of August 9 was construed by the Commission in its own refund order of August 13, 1976, entitled "Order Imposing Refund Obligation Pursuant to Order of the Court" of August 9, 1976. It is a stay (in both instances) of the Commission's orders that is so conditioned that the stay is inapplicable if the producer's filing contains an acknowledgment of refund obligation in the event the

Commission's rate increase orders are held invalid, in whole or part.

(b) The effect of the November 9 order, as made applicable to "flowing gas" from reserves already dedicated to the interstate market, and to offshore wells which are required to be dedicated to the interstate market, contributes to the public interest, by avoiding the building up of a claim of equity that might militate against possible future refund, a claim that might be asserted by producers contending that they had received and disbursed proceeds authorized by the Commission without any effective notice or awareness of exposure to any risk of refund.

(c) The court takes this occasion to add that its inclusion of a reference to refund obligation does not indicate any position as to whether or not a refund will be required. It has not been able as of the present time adequately to assess the merits.

3. The court is aware that there exists a present dispute as to which Circuit Court of Appeals of the United States properly has venue to entertain petitions for review of Opinions No. 770 and 770-A. The court does not mean by this order to assert that it will finally be concluded that proper venue lies in this circuit, but only that we have concluded that whatever doubt as may exist does not preclude this court, where a petition for review has been filed, from acting upon the matter of a stay, pending resolution of the venue question. Thus, this order today entered is subject to modification by further order not only of this court, but of such other court as may finally be determined to have jurisdiction and venue.

Per Curiam

[Filed November 18, 1976]

APPENDIX F

STATUTES AND REGULATIONS

Natural Gas Act, 15 U.S.C. § 717, et seq.

Sec. 4(e), 15 U.S.C. § 717c(e) Whenever any such new schedule is filed the Commission shall have authority, either upon complaint of any State, municipality, State commission, or gas distributing company, or upon its own initiative without complaint, at once, and if it so orders, without answer or formal pleading by the natural-gas company, but upon reasonable notice, to enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service; and pending such hearing and the decision thereon, the Commission, upon filing with such schedules and delivering to the natural-gas company affected thereby a statement in writing of its reasons for such suspension, may suspend the operation of such schedule and defer the use of such rate, charge, classification, or service, but not for a longer period than five months beyond the time when it would otherwise go into effect; and after full hearings, either completed before or after the rate, charge, classification, or service goes into effect, the Commission may make such orders with reference thereto as would be proper in a proceeding initiated after it had become effective. If the proceeding has not been concluded and an order made at the expiration of the suspension period, on motion of the natural-gas company making the filing, the proposed change of rate, charge, classification, or service shall go into effect. Where increased rates or charges are thus made effective, the Commission may, by order, require the natural-gas company to furnish a bond, to be approved by the Commission, to refund any amounts ordered by the Commission, to keep accurate accounts in detail of all amounts received by reason of such increase, specifying by whom and in whose behalf such amounts were paid, and, upon completion of the hearing and decision, to order such natural-gas company to refund, with interest, the portion of such increased rates or charges by its decision found not justified. At any hearing involving a rate or charge sought to be increased, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the natural-gas company, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before it and decide the same as speedily as possible.

APPENDIX G

Sec. 19(b), 15 U.S.C. § 717r(b) . . . The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the court may order such additional evidence to me taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendation, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 346 and 347 of Title 28.

APPENDIX H

§ 1.20 Hearings.

(a) *How initiated.* Hearings for the purpose of taking evidence shall be initiated by the Commission by issuance of an order or by notice of the Secretary announcing the initiation of a hearing.

(b) *Consolidation.* The Commission upon its own motion by a party or staff counsel, may order proceedings involving a common question of law or fact to be consolidated for hearing of any or all the matters in issue in such proceedings.

(c) *Presiding officers.* All such hearings shall be held before the Commission or a duly designated presiding officer; but nothing in this section shall be deemed to supersede or preclude the conduct of proceedings before boards or other officers specially provided for in § 1.37 or as the Commission may, after due notice, specially authorize and order.

(d) *Disqualification of a presiding officer.* A presiding officer may withdraw from a proceeding when he deems himself disqualified, or he may be withdrawn by the Commission for good cause found after timely affidavits alleging personal bias or other disqualifications have been filed and the matter has been heard by the Commission or by a presiding officer to whom it has delegated the matter for investigation and report.

(e) *Appearances.* The Commission or the presiding officer before whom the hearing is held will cause to be entered upon the record all appearances, with a notation in whose behalf each appearance is made. Included in such appearances shall be staff counsel participating, and a notation shall be made in the record of the names of the members of the Commission's technical staff participating, including accountants, engineers, and other ex-

perts, who have been assigned to work on the investigation or to assist in the trial of the case.

(f) *Order of procedure.* In hearings upon applications, declarations of intention, and determinations of the actual legitimate original cost of licensed projects, the applicant, declarant or licensee shall open and close. In hearings on formal complaints or petitions, the complainant or petitioner, as the case may be, shall open and close. In hearings involving suspended rates, the respondent shall open and close. In hearings on investigations, the presiding officer may direct who shall open and close. In hearings in proceedings in which accounting entries are questioned by the Commission, the party whose entries are in question shall open and close. When proceedings have been consolidated for hearing, the presiding officer shall designate who shall open and close. Intervenors shall follow the parties in whose behalf the intervention is made; where the intervention is not in support of an original party, the presiding officer shall designate at what stage such intervener shall be heard. In proceedings where the evidence is peculiarly within the knowledge or control of another party or participant, the foregoing order of presentation may be varied by the presiding officer. The applications (including attached exhibits), declarations of intention, complaints, formal protests, determinations of actual legitimate original cost of licensed projects, orders to show cause and responses thereto, and similar formal documents upon which hearings are fixed shall, without further action, be considered as parts of the record as pleadings: *Provided, however,* That in no event, except as contemplated by the provisions of § 1.32(b), shall such pleadings, or any part thereof, be considered as evidence of any fact other than that of the filing thereof unless offered and received in evidence in accordance with the Commission's rules.

(g) *Presentation by the parties.* (1) Parties and staff counsel shall have the right of presentation of evidence,

cross-examination, objection, motion, argument and appeal. The taking of evidence and subsequent proceedings shall proceed with all reasonable diligence and with the least practicable delay.

(2) When objections to the admission or exclusion of evidence before the Commission or the presiding officer are made, the grounds relied upon shall be stated briefly. Formal exceptions are unnecessary and will not be taken to rulings thereon.

(h) [Reserved]

(i) *Limiting number of expert witnesses.* The Commission or the presiding officer may limit appropriately the number of expert witnesses that may be heard upon any issue.

(j) *Additional evidence.* At any stage of the hearing the Commission or the presiding officer may call for further evidence upon any issue, and require such evidence to be presented by the party or parties concerned or by the staff counsel, either at that hearing or adjournments thereof. At the hearing, the Commission or the presiding officer may, if deemed advisable, authorize any participant to file specific documentary evidence as a part of the record within a fixed time, expiring not less than 10 days before the date fixed for filing and serving briefs.

(k) *Transcript and record.* Hearings shall be stenographically reported by the official reporter of the Commission, and a transcript of said report shall be a part of the record and the sole official transcript of the proceeding. Such transcripts shall include a verbatim report of the hearings; nothing shall be omitted therefrom except as directed on the record by the Commission or the presiding officer. After the closing of the record, there shall not be received in evidence or considered as part of the record any document, letter or other writing submitted after the close of testimony except as provided

in paragraph (j) of this section, or changes in the transcript as provided in paragraph (l) of this section.

(l) *Transcript corrections.* Corrections in the official transcript may be made only to make it conform to the evidence presented at the hearing and to speak the truth. No corrections or physical changes shall be made in or upon the official transcript of the proceeding, except as provided in this section. Transcript corrections agreed to by opposing attorneys may be incorporated into the record, if and when approved by the Commission or the presiding officer, at any time during the hearing or after the close of evidence, as may be permitted by the Commission, or by the presiding officer before the filing of his report, but not less than 10 days in advance of the time fixed for filing final briefs. The Commission or the presiding officer may call for the submission of proposed corrections and may make disposition thereof at appropriate times during the course of a proceeding.

(m) *Contents of orders and notices initiating hearings*—(1) *Rule making proceedings.* The order or notice shall state the time and place of hearing, and nature of the proceeding, recite the authority under which the rule is proposed to be adopted and promulgated, and include either the terms or substance of the proposed rule or a description of the subjects and issues involved to inform interested persons of the nature of the proceeding, so as to permit any interested person to submit views, data, or proposals relative thereto; and such notice will set forth a time period within which interested persons may submit written data, views, or arguments concerning the proposed rule, or request oral argument thereon.

(2) *Other proceedings.* The order or notice initiating a hearing shall set forth the authority and jurisdiction under which the hearing is to be held, shall state the nature of the proceeding and shall name the officer designated to preside at the hearing, except as hereinafter provided. Such order or notice shall also specify the final date for the filing of protests to the authorization sought and for the filing of petitions and notices to intervene except in cases where such date has been fixed by a former notice. The order or notice initiating the hearing shall not specify the date of hearing unless the Commission deems it appropriate that it do so: *Provided, however,* That where the notice or order provides that the Commission may, after a non-contested hearing, dispose of the proceedings pursuant to the provisions of § 1.30 (c) (1) or (2) or § 1.32(a) or (b), as may be appropriate, the notice or order shall also fix a date for hearing as soon after the expiration of the time for filing protests, petitions to intervene and notices of intervention as may be practicable. In such instance, the notice or order need not designate the presiding examiner but shall state that if a protest, petition to intervene in opposition, or notice of intervention in opposition is filed, the hearing date will be vacated and a new date for hearing will be fixed.

[Order 141, 12 F.R. 8478, Dec. 19, 1947, as amended by Order 175, 19 F.R. 5213, Aug. 18, 1954; Order 179, 20 F.R. 3934, June 7, 1955; Order 217, 24 F.R. 9472, Nov. 25, 1959]